

FINAL

Environmental Assessment

for the

Construction of a New Dormitory

St Clair County
Scott Air Force Base, Illinois



Prepared By:
375th Civil Engineering Squadron
Environmental Management Flight
Scott Air Force Base, Illinois 62225-5035

May 2006

Report Documentation Page				Form Approved OMB No. 0704-0188	
Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.					
1. REPORT DATE MAY 2006		2. REPORT TYPE		3. DATES COVERED 00-00-2006 to 00-00-2006	
4. TITLE AND SUBTITLE Final Environmental Assessment for Construction of a New Dormitory St Clair County Scott Air Force Base, Illinois				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) 375th Civil Engineer Squadron ,Environmental Management Flight,Scott AFB,IL,62225-5035				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution unlimited					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT Same as Report (SAR)	18. NUMBER OF PAGES 75	19a. NAME OF RESPONSIBLE PERSON
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified			

**FINDING OF NO SIGNIFICANT IMPACT TO
CONSTRUCT NEW DORMITORY
SCOTT AIR FORCE BASE, ILLINOIS**

Agency: United States Air Force, Headquarters, Air Mobility Command

Background: Pursuant to the President's CEQ regulations, {Title 40 Code of Federal Regulations (CFR) Parts 1500-1508}, the National Environmental Policy Act of 1969 {42 USC §4321, et seq.}, Air Force Instruction (AFI) 32-7061, and the Environmental Impact Analysis Process, as promulgated at 32 CFR Part 989, the U.S. Air Force conducted an Environmental Assessment (EA) of the potential consequences associated with the construction of a new dormitory at Scott AFB, IL. The EA considered all potential natural resources, environmental, and cultural impacts of the construction and demolition project (hereinafter, "Proposed Action"), both as solitary actions and in conjunction with other proposed activities. This Finding of No Significant Impact (FONSI) summarizes the results of this EA and provides the U.S. Air Force's rationale for the Proposed Action and No-Action Alternative.

PROPOSED ACTION: The Proposed Action involves the construction of a new dormitory, the demolition of Building 1912, the partial demolition of Building 1899 and improvements to Ward Drive.

Alternative: The alternative to the Proposed Action is the No-Action. Implementation of the No-Action Alternative would not bring Scott AFB in compliance with the Dormitory Master Plan or with AFI 32-6005, *Unaccompanied Housing Management*.

Cultural and Historical Resources: The Proposed Action site is located outside of the Historic District at Scott AFB and is not located within any other cultural or historical resource area. Buildings 1900 and 1899 are not eligible for listing under the Natural Register of Historic Places.

No artifacts or historical objects are expected to be excavated during construction. In the unlikely event artifacts or historical objects are discovered, construction activities would cease until the Cultural Resources Specialist and Base Historian are notified and the appropriate action is accomplished.

Air Quality: Fugitive dust and construction vehicle exhaust would be generated during implementation of the Proposed Action. However, these emissions would not constitute a major source of air pollutants based on quantitative analyses of particulate matter and vehicle emissions generated by projects of similar size and scope. The estimated values of direct and indirect emissions are below the *de minimus* thresholds specified at 40 CFR 93.153(b)(1). Therefore, the Proposed Action would not increase emissions over baseline emission levels. The Proposed Action would be in compliance with all relevant requirements and milestones contained in the Illinois State Implementation Plan; therefore, a conformity determination would not be necessary.

Hazardous Materials and Waste: The use of hazardous materials during demolition activities would be limited and generation of hazardous waste would not be anticipated from the Proposed

Action. There would be no anticipated impact to human health or the environment during demolition activities or from activities associated with implementation of the Proposed Action.

Noise: Some noise impacts would occur during the implementation of the Proposed Action. The amount of noise generated from operational activities would be temporary and negligible.

Geology and Soils: The surface area would be disturbed by demolition and construction activities at the Proposed Action; however, this disturbance would not be a significant negative impact to soil or geological resources. Necessary measures and best management practices would be utilized to prevent soil erosion during and after demolition activities.

Water Resources: There would be no significant impacts to surface or ground water quality during demolition of the Proposed Action. Necessary measures and best management practices would be utilized to prevent sedimentation of surface water resources.

Occupational Safety and Health: If the Proposed Action is implemented, no unfavorable impacts to occupational health and safety are projected. A positive impact to Scott AFB personnel is expected.

Biological Resources: No biological resources, including endangered or threatened species, or rare fauna and flora inhabit the Proposed Action area. As such, no impacts are probable.

Environmental Justice: There would be no disproportionately high or adverse impact on minority or low-income populations as a result of the Proposed Action.

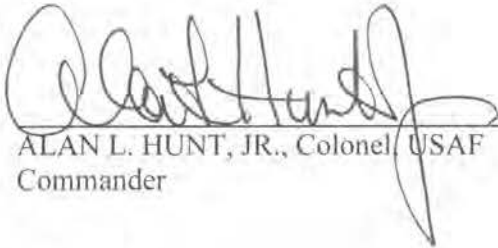
Indirect and Cumulative Impacts: No impacts are anticipated from site-specific, direct, indirect, or cumulative impacts associated with the Proposed Action.

Relationship Between Short-term Uses and Enhancement of Long-Term Productivity: Implementation of the Proposed Action is not anticipated to impact short-term or long-term productivity.

Irreversible and Irretrievable Commitment of Resources: There would be minor irreversible and irretrievable commitment of resources if the Proposed Action were selected. Military funds would be permanently expended.

Unavoidable Adverse Impacts: There would be no major unavoidable adverse impacts associated with the Proposed Action.

FINDING OF NO SIGNIFICANT IMPACT: Based upon my review of the facts and analyses contained in the attached Environmental Assessment for the Construction of a new Dormitory dated May 2006, I conclude that implementation of the Proposed Action would not have a significant impact, either by itself or cumulatively with other projects at Scott AFB. Accordingly, the requirements of NEPA, the CEQ regulations, and 32 CFR 989 are fulfilled and an Environmental Impact Statement is not required. The signing of this Finding of No Significant Impact completes the environmental impact analysis process under Air Force Regulations.



ALAN L. HUNT, JR., Colonel, USAF
Commander

4 OCT 06
DATE

Attachment:
Environmental Assessment

EXECUTIVE SUMMARY	ES-1
1.0 PURPOSE OF AND NEED FOR THE PROPOSED ACTION.....	1-1
1.1 INTRODUCTION	1-1
1.2 NEED FOR ACTION	1-1
1.3 OBJECTIVE	1-2
1.4 SCOPE OF THE EA	1-2
1.5 DECISION(S) THAT MUST BE MADE	1-2
1.6 APPLICABLE REGULATORY REQUIREMENTS AND REQUIRED COORDINATION.....	1-6
2.0 DESCRIPTION OF THE ALTERNATIVES INCLUDING THE PROPOSED ACTION.....	2-1
2.1 INTRODUCTION	2-1
2.2 SELECTION CRITERIA FOR ALTERNATIVES.....	2-1
2.3 ALTERNATIVES CONSIDERED BUT ELIMINATED FROM DETAILED STUDY	2-1
2.4 DESCRIPTION OF PROPOSED ALTERNATIVES	2-1
2.4.1 Proposed Action.....	2-1
2.4.2 No-Action Alternative	2-2
2.5 DESCRIPTION OF PAST AND REASONABLY FORESEEABLE FUTURE ACTIONS RELEVANT TO CUMULATIVE IMPACTS	2-2
2.6 IDENTIFICATION OF PREFERRED ALTERNATIVE	2-2
3.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES...3-1	
3.1 INTRODUCTION	3-1
3.2 AIR QUALITY	3-2
3.2.1 Affected Environment.....	3-2
3.2.2 Environmental Consequences	3-4
3.2.3 Cumulative Effects on Air Quality	3-5
3.3 NOISE.....	3-5
3.3.1 Affected Environment.....	3-5
3.3.2 Environmental Consequences	3-5
3.3.3 Cumulative Effects on Noise	3-9
3.4 WASTES, HAZARDOUS MATERIALS, AND STORED FUELS.....	3-9
3.4.1 Affected Environment.....	3-9
3.4.2 Environmental Consequences	3-11
3.4.3 Cumulative Impacts to Wastes, Hazardous Materials, and Stored Fuels	3-12
3.5 WATER RESOURCES	3-12

3.5.1	Affected Environment.....	3-12
3.5.2	Environmental Consequences.....	3-15
3.5.3	Cumulative Impacts to Surface Water Resources.....	3-15
3.6	BIOLOGICAL RESOURCES.....	3-15
3.6.1	Affected Environment.....	3-15
3.6.2	Environmental Consequences.....	3-19
3.6.3	Cumulative Impacts to Biological Resources.....	3-19
3.7	SOCIOECONOMIC RESOURCES.....	3-19
3.7.1	Affected Environment.....	3-19
3.7.2	Environmental Consequences.....	3-20
3.7.3	Cumulative Impacts to Socioeconomics.....	3-20
3.8	CULTURAL RESOURCES.....	3-20
3.8.1	Affected Environment.....	3-20
3.8.2	Environmental Consequences.....	3-23
3.8.3	Cumulative Impacts to Cultural Resources.....	3-23
3.9	LAND USE.....	3-23
3.9.1	Affected Environment.....	3-23
3.9.2	Environmental Consequences.....	3-24
3.9.3	Cumulative Impacts to Land Use.....	3-24
3.10	TRANSPORTATION SYSTEMS.....	3-24
3.10.1	Affected Environment.....	3-24
3.10.2	Environmental Consequences.....	3-24
3.10.3	Cumulative Impacts to Transportation.....	3-26
3.11	AIRSPACE/AIRFIELD OPERATIONS.....	3-26
3.11.1	Affected Environment.....	3-26
3.11.2	Environmental Consequences.....	3-26
3.11.3	Cumulative Impacts to Airspace/Airfield Operations.....	3-26
3.12	SAFETY AND OCCUPATIONAL HEALTH.....	3-27
3.12.1	Affected Environment.....	3-27
3.12.2	Environmental Consequences.....	3-27
3.12.3	Cumulative Impacts to Safety and Occupational Health.....	3-27
3.13	ENVIRONMENTAL MANAGEMENT, POLLUTION PREVENTION.....	3-27
3.13.1	Affected Environment.....	3-27
3.13.2	Environmental Consequences.....	3-28
3.13.3	Cumulative Impacts Environmental Management, Pollution Prevention.....	3-28
3.14	GEOLOGY AND SOILS.....	3-28
3.14.1	Affected Environment.....	3-28
3.14.2	Environmental Consequences.....	3-28
3.14.3	Cumulative Impacts to Geologic Resources.....	3-29
3.15	ENVIRONMENTAL JUSTICE.....	3-29
3.15.1	Affected Environment.....	3-29
3.15.2	Environmental Consequences.....	3-29

3.15.3	Cumulative Impacts Related to Environmental Justice	3-30
3.16	SUMMARY OF ENVIRONMENTAL CONSEQUENCES.....	3-30
3.17	UNAVOIDABLE ADVERSE IMPACTS.....	3-30
3.17.1	Proposed Action.....	3-30
3.17.2	No-Action Alternative	3-30
4.0	REFERENCES.....	4-1
5.0	LIST OF PREPARERS.....	5-1
6.0	PERSONS CONTACTED.....	6-1

LIST OF TABLES

<u>NUMBER</u>		<u>PAGE</u>
Table 3-1.	Description of Environmental Consequences	3-1
Table 3-2.	Comparison of Air Quality Measurements in St. Clair County (East St. Louis Station) with Federal Standards	3-3
Table 3-3.	Air Pollutant Emissions Inventory for Scott AFB in 1998 (tons/year).....	3-4
Table 3-4.	Comparison of Environmental Consequences*	3-30

LIST OF FIGURES AND MAPS

<u>NUMBER</u>		<u>PAGE</u>
Figure 1-1	Project Location	1-3
Figure 1-2	Site Location	1-5
Figure 3-1	Operational Constraints	3-7
Figure 3-2	Installation Restoration Program and Areas of Concern	3-13
Figure 3-3	Wetlands and Floodplains.....	3-17
Figure 3-4	Cultural Resources	3-21
Figure 3-5	Existing Land Use.....	3-25

LIST OF APPENDICES

A	Air Force Form 813
B	Site Photographs
C	Public Comments

LIST OF ABBREVIATIONS AND ACRONYMS

375 CES	375th Civil Engineer Squadron
ACM	asbestos-containing materials
AFB	Air Force Base
AFH	Air Force Handbook
AFI	Air Force Instruction
AFMAN	Air Force Manual
AICUZ	Air Installation Compatible Use Zone
AQCR	Air Quality Control Region
AOC	area of concern
AT/FP	anti-terrorism/force protection
BGP	Base General Plan
CAA	Clean Air Act
CEQ	Council on Environmental Quality
CES/CEV	Civil Engineering Squadron/Civil Environmental Flight
CFR	Code of Federal Regulation
dB	decibels
DoD	Department of Defense
DoDI	Department of Defense Instruction
EA	Environmental Assessment
EM	Engineer Manual
EO	Executive Order
EPA	Environmental Protection Agency
EPC	Environmental Protection Committee
ERP	Environmental Restoration Program
FIP	Federal Implementation Plan
FONSI	Finding of No Significant Impact
IEPA	Illinois Environmental Protection Agency
INRMP	Integrated Natural Resource Management Plan
IRP	Installation Restoration Program
LBP	lead-based paint
mgd	million gallons per day
NAAQS	National Ambient Air Quality Standard
NEPA	National Environmental Policy Act
NPDES	National Pollutant Discharge Elimination System
OSHA	Occupational Safety and Health Administration
P2	pollution prevention
ppm	parts per million

LIST OF ABBREVIATIONS AND ACRONYMS (Cont'd)

PCB	polychlorinated biphenyl
RCRA	Resource Conservation and Recovery Act
ROI	Region of Influence
SHPO	State Historic Preservation Office
SIP	State Implementation Plan
SMSA	Standard Metropolitan Statistical Area
TO	Technical Orders
UFC	Unified Facilities Criteria
USAF	United States Air Force
UST	Underground Storage Tank
USTRANSCOM	United States Transportation Command
USC	United States Code

This page intentionally left blank

EXECUTIVE SUMMARY

The 375th Civil Engineer Squadron (375 CES) proposes to construct a new dormitory to replace Building 1912. The new dormitory would be a three-story facility located adjacent to Building 1820 in the southwest corner of the base. The facility will include 120 to 144 rooms, updated security, and improved amenities. Construction of the building would comply with the United States Air Force's commitment to increasing privacy and improving unaccompanied housing. The project would also include demolition of Building 1912, partial demolition of Building 1899, and roadway improvements along Ward Drive.

This Environmental Assessment (EA) has been prepared in accordance with the *National Environmental Policy Act of 1969* (NEPA), the Council on Environmental Quality regulations [40 Code of Federal Regulations (CFR), sections 1500-1508], and Air Force Instruction 32-7061, *Environmental Impact Analysis Process*, as promulgated at 32 CFR 989. This EA focuses on specific issues and concerns of the Proposed Action and the alternatives that could affect the environment of Scott Air Force Base and the surrounding properties. The alternatives for this EA include the Proposed Action and the No-Action Alternative.

This page intentionally left blank

1.0 PURPOSE OF AND NEED FOR THE PROPOSED ACTION

1.1 INTRODUCTION

The Proposed Action is located at Scott Air Force Base in St. Clair County, Illinois, which is approximately 20 miles east of St. Louis, Missouri. The base comprises approximately 3,600 acres and is located in a predominantly agricultural area. The base is immediately south of Interstate Highway 64 (Figure 1-1), near the cities of O'Fallon and Belleville.

The 375th Civil Engineering Squadron (375 CES) is proposing to construct a new dormitory in Fiscal Year 2007. The new dormitory would be a three-story facility with 120 to 144 rooms located adjacent to the existing dormitory at Building 1820 (Figure 1-2). Upon completion of the new dormitory the existing dormitory at Building 1912 would be demolished. The project would also involve widening Ward Drive from two to three lanes and a partial demolition of Building 1899.

1.2 NEED FOR ACTION

Currently, Scott Air Force Base (AFB) does not have adequate on-base housing to accommodate unaccompanied enlisted personnel. The existing dormitory, Building 1912, does not satisfy anti-terrorism/force protection (AT/FP) guidelines. Nor does the building meet current Air Force standards for quality of life. The building does not have sufficient public phone lines or internet access and there is insufficient bulk storage. Additionally, Building 1912 lacks proper lighting, private closet space, and laundry and private bathroom facilities in accordance with Air Force standards. Parking in the vicinity of Building 1912 is shared with the United States Transportation Command (USTRANSCOM) and is not sufficient for both the residents and the users of adjacent buildings.

The existing facility (Building 1912) does not provide adequate housing according to current AF housing standards. The quality of life for wing personnel would continue to be compromised until these insufficiencies are remedied. Residents would continue to struggle with poor laundry and bathroom facilities, and poor communications accessibility. Building 1912 is out of compliance with force protection measures, putting all dorm occupants at an unnecessary risk. Housing enlisted personnel in such living conditions continues to place their safety in jeopardy, and it compromises their quality of life.

The intersection at Ward Drive and Winters Street is one of the most congested intersections at Scott AFB. A traffic study conducted in 2003 indicated that the intersection is rated at a level of "F" which is the worst rating on a scale that ranges from "A" to "F". Level "F" is generally considered an unacceptable level of service and usually results in driver frustration. Traffic congestion occurs as traffic converges in this area from Patriots Landing, the dormitory complex, administration buildings and community services located along Ward Drive. The current roadway design is inefficient and confusing to drivers and pedestrians. Failure to modify the existing roadway would continue to create traffic safety hazards due to excessive congestion.

1.3 OBJECTIVE

The objective of this Environmental Assessment (EA) is to evaluate the potential impacts associated with the implementation of the Proposed Action and the No-Action Alternative and to determine the significance of those impacts. If the potential impacts are not considered significant, a Finding of No Significant Impact (FONSI) will be prepared.

1.4 SCOPE OF THE EA

This EA identifies, describes, and evaluates the potential environmental impacts associated with implementation of the Proposed Action and the No-Action Alternative. Furthermore, this document includes an analysis of the impacts of the Proposed Action and the No-Action Alternative as they relate to the following environmental and socioeconomic programs:

- Air Quality
- Noise
- Wastes, Hazardous Materials/Stored Fuel
- Land Use
- Safety and Occupational Health
- Water Resources
- Floodplains and Wetlands
- Biological Resources
- Environmental Management
- Geology and Soils
- Socioeconomics
- Cultural Resources
- Transportation
- Airspace/Airfield Operations
- Pollution Prevention
- Environmental Justice

1.5 DECISION(S) THAT MUST BE MADE

The decision to be made will include selecting one of the alternatives described as follows:

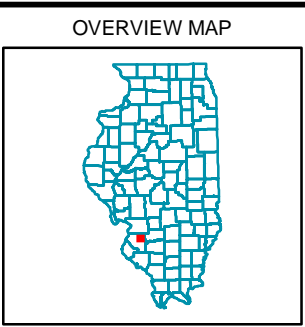
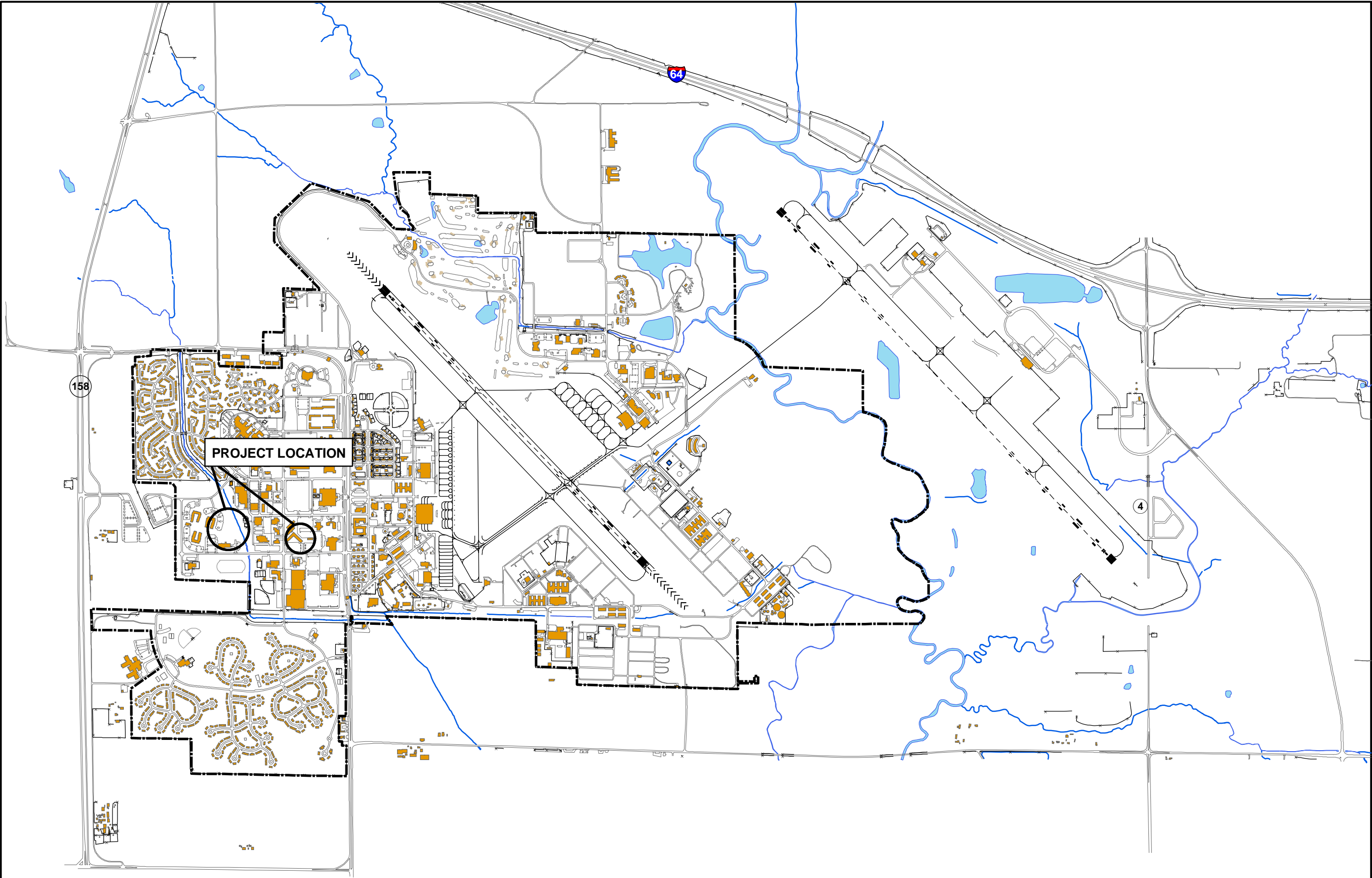
Proposed Action:

The Proposed Action includes the construction of a new dormitory and the demolition of Building 1912. The Proposed Action would also include the partial demolition of Building 1899 and the widening of Ward Drive.

No-Action Alternative:

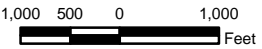
The No-Action Alternative would leave conditions status quo. A new dormitory would not be constructed and unaccompanied housing would remain inadequate.

Upon review of this document, the 375th Airlift Wing Environmental Protection Committee (EPC) Chairperson at Scott AFB will decide which alternative to implement.



LEGEND

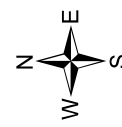
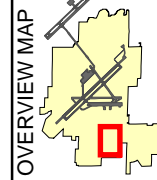
- BASE BOUNDARY
- AIRFIELD SURFACE
- BUILDINGS
- SURFACE WATER
- STREAM
- FENCE LINES
- RAILROADS



Construction of New Dormitory
Scott Air Force Base

Figure 1-1. Project Location

This page intentionally left blank



Construction of Dormitory
Scott Air Force Base

Figure 1-2.
Site Location

1.6 APPLICABLE REGULATORY REQUIREMENTS AND REQUIRED COORDINATION

Following is a list of Air Force Instructions (AFI), Executive Orders (EO), Acts, Air Force Manuals (AFMAN), Engineer Manual (EM), Code of Federal Regulations (CFR), Department of Defense Instructions (DoDI), and Technical Orders (TO) that are applicable to the Proposed Action.

- *National Environmental Policy Act*, Public Law 91-190, 42 United States Code (USC) 4321-4347, January 1, 1970;
- Council on Environmental Quality (CEQ) regulations, 40 CFR parts 1500 through 1505;
- EO 11988 and 11990, Floodplain Management and Protection of Wetlands;
- EO 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations;
- *Clean Air Act* (1970, Amended 1990);
- Corps of Engineers Manual, EM 385-1-1, General Safety Requirements;
- 32 CFR, Part 989, Environmental Impact Analysis Process;
- AFI 32-6005, *Unaccompanied Housing Management*
- AFI 32-7062, *Air Force Comprehensive Planning*;
- AFI 32-7064, *Natural Resources Management*;
- AFI 32-7065, *Cultural Resources Management*;
- DoDI 4165.57 and AFI 32-7063, *Air Installation Compatible Use Zone (AICUZ) Programs*;
- 29 CFR, Occupational Safety and Health Standards;
- AFMAN 32-1123, *Unified Facilities Guide*;
- AFH 32-1084 *Civil Engineer Facility Requirements*;
- 40 CFR 93.153, Air Conformity Determination;
- *Resource Conservation Recovery Act (RCRA)* 1970.

In addition to this list, coordination with regulatory agencies is discussed below.

The State Historic Preservation Office (SHPO) is not typically notified of new construction, unless the project involves the demolition or alteration of a historical building or structure. Building 1912 was constructed in 1969 and Building 1899 was constructed in 1987 and neither building is considered a potential historical structure.

Various permits will be required for activities such as construction or extensions of sanitary/storm sewers and water mains, and other related activities. In addition to the aforementioned requirements and prior to construction, a Digging Permit, Air Force Form 103, (Base Civil Engineering Work Clearance Request) is required under AFI 32-1031 and Illinois Underground Utility Facilities Damage Prevention Act, Public Act 86-0674, amended 88-0681 and AFI 32-1031. This section is not all-inclusive, as environmental regulations and standards are frequently modified.

During implementation of the Proposed Action, the 375th Civil Engineering Squadron/Civil Environmental Flight (CES/CEV) (Environmental Management Flight) would be notified immediately if an action or activity were observed that could adversely affect human health and/or the environment. This organization would take immediate action to correct the condition or contact Illinois Environmental Protection Agency (IEPA) for further guidance, if necessary. Best management practices are encouraged throughout the construction process.

This page intentionally left blank

2.0 DESCRIPTION OF THE ALTERNATIVES INCLUDING THE PROPOSED ACTION

2.1 INTRODUCTION

This section describes the selection criteria for alternatives, details of the Proposed Action and No-Action, and past and reasonably foreseeable future actions relevant to cumulative impacts.

2.2 SELECTION CRITERIA FOR ALTERNATIVES

- 1) Minimum impact to the environment
- 2) Facility must meet the Base General Plan (BGP) provisions
- 3) Comply with Air Force Standards for Unaccompanied Housing
- 4) Comply with Air Force Standards for AT/FP
- 5) Comply with the Air Force Dormitory Master Plan

Alternatives considered for this EA include new construction (Proposed Action) and the No-Action. The Proposed Action was selected based upon the ability to meet the selection criteria listed above. The action is compatible with the October 2004 BGP. The BGP provides an illustration of Scott AFB's present and future capability to support its mission. The BGP is a stand-alone document prepared to respond to the Air Force's commitments to planning for future development and protecting the environment, as prescribed in the AFI 32-7062, *Air Force Comprehensive Planning*.

2.3 ALTERNATIVES CONSIDERED BUT ELIMINATED FROM DETAILED STUDY

As described in Section 1-2, the existing dormitory does not meet safety and standard of living requirements for unaccompanied housing. An extensive renovation of Building 1912 would create a dormitory that meets the minimum Air Force standards for unaccompanied housing. However, this renovation would not comply with the Dormitory Master Plan and the BGP. The buildings scheduled for demolition are located in a portion of the base that has been designated by the BGP as administrative. Demolition of these buildings would open space for the construction of badly needed office space. A renovation of Building 1912 would also be unable to incorporate recommended safety and security measures. The building would lack adequate fire suppression systems and the AT/FP requirements would remain unmet.

For these reasons, only two alternatives were evaluated for this EA, the Proposed Action and No-Action.

2.4 DESCRIPTION OF PROPOSED ALTERNATIVES

2.4.1 Proposed Action

The Proposed Action is to construct a three-story facility with reinforced concrete foundation, brick veneer, steel trusses, and sloped standing seam metal roof; complete with all necessary utilities, fire detection/suppression, and furniture. This project includes adequate parking, lighting, landscaping, and all necessary support and any other work associated with this project.

The project also includes demolition of 40% of Building 1899, the Chiller Plant that services both Building 1912 and Building 1900, and the demolition of Building 1912.

The Proposed Action would construct a dormitory to provide unaccompanied enlisted personnel with housing conducive to proper rest, relocation and personal well-being. Properly designed and furnished quarters providing individual privacy are essential to successful completion of the increasingly complicated and important jobs the enlisted force performs. The proposed action would widen Ward Drive from two lanes to three and alter intersections along Ward Drive to accommodate increased traffic flow while maintaining AT/FP measures and traffic safety. The project would comply with Department of Defense (DoD) interim minimum force protection construction standards and would be in accordance with the Scott Air Force Base Dormitory Master Plan.

2.4.2 No-Action Alternative

The existing dormitory (Building 1912) and Building 1899 would remain status quo with the No-Action Alternative.

2.5 DESCRIPTION OF PAST AND REASONABLY FORESEEABLE FUTURE ACTIONS RELEVANT TO CUMULATIVE IMPACTS

The location of the Proposed Action is in an improved portion of Scott AFB that has been previously disturbed. The current base plan (375 CES, 2004) indicates several projects in the vicinity of the Proposed Action (see Section 3.9). None of these projects are anticipated to contribute to significant cumulative impacts.

2.6 IDENTIFICATION OF PREFERRED ALTERNATIVE

The preferred alternative, referred to as the Proposed Action, includes construction of a new dormitory, demolition of Building 1912 and a partial demolition of Building 1899, and modifications to Ward Drive and additional intersections along Ward Drive.

3.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

3.1 INTRODUCTION

This chapter describes both the environmental components and potential environmental impacts that could be affected by the implementation of the Proposed Action or the No-Action Alternative. This chapter is divided into the following environmental sections:

- Air Quality
- Noise
- Wastes, Hazardous Materials, and Stored Fuels
- Water Resources, to include Floodplains and Wetlands
- Biological Resources
- Socioeconomic Resources
- Cultural Resources
- Land Use
- Transportation Systems
- Airspace/Airfield Operations
- Safety and Occupational Health
- Environmental Management, Pollution Prevention
- Geology and Soils
- Environmental Justice
- Indirect and Cumulative Impacts

Each section is then further sub-divided into the Affected Environment, Environmental Consequences, and Cumulative Impacts. The Affected Environment serves as a baseline for evaluating the environmental status of the Proposed Action and the No-Action Alternatives. This section outlines existing conditions at Scott AFB and in the vicinity of the Proposed Action.

The Environmental Consequences section determines the consequences of each action and the anticipated impact(s) that the action could have, if implemented. The Proposed Action and the No-Action Alternative could generate no impact to environmental issues, or encompass environmental consequences that may fall into the categories described in Table 3-1.

Table 3-1. Description of Environmental Consequences

Word	Definition
Short-term	effects caused during the construction and/or initial operation of the action
Long-term	effects caused after the action has been completed and/or the action is in full and complete operation or effects of the action if not approved
Irreversible	those effects caused by the proposal that cannot be reversed
Irretrievable	effects caused by an alternative that change outputs or commodities (e.g. trees, cattle, hiking, fishing) of land's use <i>and</i> must be reversible
Positive	constructive, progressive effects
Negative	harmful, destructive, unsafe, risky
Minor	trivial, irrelevant, inconsequential
Major	vital, primary, important
Adverse	unfavorable, undesirable, harsh
Direct	caused by the action and occur at the same time and place
Indirect	caused by the action and effects occur later in time or farther removed in distance, but reasonably foreseeable
Cumulative	nonrelated actions that have, are, or probably would occur in the same locality

A **significant** impact, as it applies to NEPA, requires considerations of both context and intensity. Context means that the significance of an action must be analyzed in several arenas, such as society as a whole (human, national), the affected region, the affected interests, and the locality. Significance varies with the setting of the Proposed Action. Intensity refers to the severity of impact. Responsible officials must bear in mind that more than one agency may make decisions about partial aspects of a major action. Impacts may be both beneficial and adverse. Intensity also includes the degree to which the Proposed Action and alternatives affect public health or safety. A summary table of the environmental resources that are determined to be impacted by the Proposed Action and the No-Action Alternative is provided in Section 3.16.

The third section depicts any cumulative impacts that may be associated with projects in the vicinity of the Proposed Action or No-Action Alternative. Cumulative impacts are impacts which result when the impacts of the Proposed Action or No-Action Alternative are added to other past, present, and reasonably foreseeable future actions.

3.2 AIR QUALITY

3.2.1 Affected Environment

The federal *Clean Air Act* (CAA) of 1970 required the adoption of air quality standards. These were established to protect public health, safety and welfare from known or anticipated effects of sulfur dioxide (SO₂), particulates (PM₁₀, 10 micron and smaller), carbon monoxide (CO), nitrogen dioxide (NO₂), ozone (O₃), and lead (Pb).

The CAA requires all states to submit to the United States Environmental Protection Agency (EPA) a list identifying those air quality control regions, or portions thereof, which meet or exceed the National Ambient Air Quality Standards (NAAQS) or cannot be classified because of insufficient data. Portions of air quality control regions that are shown, by monitored data or air quality modeling, to exceed the NAAQS for any criteria pollutant are designated "non-attainment" areas for that pollutant. Section 176(c) of the CAA, 42 USC, Section 7506(c), establishes a conformity requirement for federal agencies which has been implemented by regulation 40 CFR Part 93, Subpart B.

Scott AFB occurs within the Metropolitan St. Louis Interstate Air Quality Control Region (AQCR #070). The state air quality-monitoring site closest to Scott AFB is the East St. Louis monitoring station, located in St. Clair County approximately 18 miles west of the base. Table 3-2 compares the applicable federal ambient air quality standards with the East St. Louis monitoring site maximum pollutant concentrations for the 3-year period 2002-2004 (U.S. EPA 2005).

Table 3-2. Comparison of Air Quality Measurements in St. Clair County (East St. Louis Station) with Federal Standards

		Federal Ambient Air Quality Standards (ppm) ¹	Maximum Concentration (ppm) ¹		
Pollutant	Averaging Period	Primary	2002	2003	2004
Carbon monoxide	1 hour	35	3.5	4.4	3.4
	8-hour	9	2.8	3.2	2.2
Nitrogen oxide	Annual	0.053	0.017	0.016	0.016
Particulate Matter (PM ₁₀)	24-hour	150 µ/m ³	107 µ/m ³	70 µ/m ³	54 µ/m ³
	Annual	50 µ/m ³	30 µ/m ³	34 µ/m ³	29 µ/m ³
Particulate Matter (PM _{2.5}) ²	24-hour	65 µ/m ³	89 µ/m ³	51 µ/m ³	35 µ/m ³
	Annual	15.0 µ/m ³	16.7 µ/m ³	14.9 µ/m ³	14.7 µ/m ³
Lead	Quarterly mean	1.5 µ/m ³	0.04 µ/m ³	0.06 µ/m ³	0.05 µ/m ³
Sulfur dioxide	3-hour	0.5	0.190	0.168	0.124
	24 hour	0.14	0.056	0.049	0.039
	Annual	0.030	0.006	0.005	0.004
Ozone ³	1-hour	0.120	0.117	0.134	0.102
	8-hour	0.080	0.103	0.111	0.078

¹ Unless otherwise stated² There was one exceedance in 2002 with no exceedances in 2003 and 2004.³ For the 1-hour standard there were no exceedances in 2002 and 2004 and two exceedances in 2003 from this monitor. For the 8-hour standard, there were nine exceedances in 2002, three exceedances in 2003, and no exceedances in 2004 from this monitor.

This AQCR is designated as a moderate non-attainment area for ozone and PM_{2.5}, and either as attainment or no designation for the remaining pollutants.

3.2.1.1 Emissions Inventory

This section presents information on air pollutant emissions from activities at Scott AFB. The Scott AFB emissions are also compared with ozone-producing pollutant emissions from the Illinois portion of the St. Louis Standard Metropolitan Statistical Area (SMSA) of AQCR #070. The St. Louis SMSA emission inventory accounts for emission sources in St. Clair County, as well as emission sources from four other counties.

Table 3-3 summarizes annual emissions by source category for calendar year 1998. This table was developed from an emission inventory compiled by Scott AFB (Laura Dods, pers. comm., 2004). Emissions, reported in tons per year, are organized into 18 categories: external combustion services, stationary internal combustion engines, medical waste incineration, storage tanks, fuel transfers, equipment leaks, spray painting booths, solvent parts washers, miscellaneous product usage, fire fighter training, fuel cell maintenance, landfills, non-

destructive inspection, ordnance detonation, pesticide application, small arms range, wet cooling towers, and woodworking.

Table 3-3. Air Pollutant Emissions Inventory for Scott AFB in 1998 (tons/year)

Source Category	Carbon Monoxide	Nitrogen Oxides	Particulate Matter	Sulfur Oxides	Volatile Organic Compounds
External Combustion Sources	2.24	2.82	0.216	0.017	0.156
Stationary Internal Combustion Engines	1.12	4.98	0.186	0.154	0.210
Medical Waste Incineration	0.100	0.120	0.103	0.073	0.010
Storage Tanks	--	--	--	--	3.32
Fuel Transfers	--	--	--	--	6.52
Equipment Leaks	--	--	0.003	--	0.134
Spray Painting Booths	--	--	--	--	0.232
Solvent Parts Washers	--	--	--	--	0.262
Miscellaneous Product Usage	--	--	--	--	0.374
Fire Fighter Training	0.031	0.112	0.019	--	0.048
Fuel Cell Maintenance	--	--	--	--	0.013
Landfills	0.147	--	--	--	1.90
Non-Destructive Inspection	--	--	--	--	<0.001
Ordnance Detonation	<0.001	<0.001	<0.001	--	<0.001
Pesticide Application	--	--	--	--	0.116
Small Arms Range	0.010	--	--	--	--
Wet Cooling Towers	--	--	0.449	--	--
Woodworking	--	--	0.770	--	--

3.2.2 Environmental Consequences

3.2.2.1 Proposed Action

Based on similar projects performed at Scott AFB, a conformity determination would not be required, as the total of direct and indirect emissions from demolition activities at the site of the Proposed Action are below *de minimus* thresholds specified at 40 CFR 93.153(b)(1). Specifically stated, implementation of the Proposed Action would not increase emissions over baseline emission levels. The statutory requirements of conformity are included in section 176(c) of the CAA, and require the EPA to publish regulations requiring federal actions to conform to applicable state or federal implementation plans (SIPs or FIPs) to ensure that the actions do not interfere with strategies employed to attain National Ambient Air Quality Standard. The EPA proposed conformity regulations entitled *Determining Conformity of General Federal Actions to State or Federal Implementation Plans*. These were brought into effect on January 31, 1994. The intent of the conformity ruling is to ensure that federal actions do not adversely affect the timely attainment and maintenance of air quality standards. Air Force personnel and installation planners are to analyze each Air Force action, in accordance with EPA regulation 40 CFR 93, to ensure conformity with the applicable SIP or FIP. The conformity analysis examines the impacts of the direct and indirect air emissions from a proposed Air Force action and determines whether the action conforms to the applicable SIP or FIP. The Proposed

Action would be in compliance with, or consistent with, all relevant requirements and milestones contained in the Illinois SIP. Contractor(s) and subcontractor(s) of this project must comply with these regulations, including 42 USC 7418(a) (state and local requirements).

A **short-term minor** increase in emissions from equipment and vehicles would occur during the implementation of the Proposed Action. Fugitive dust and particulate matter would be emitted into the air from access roads, stockpiles, and/or other work areas. These emissions would be temporary and would return to pre-construction levels once the demolition was completed. Water sprinkling would be the preferred method of controlling fugitive dust, especially if a nuisance or road hazard due to fugitive dust particulate arises, or is anticipated due to windy or dry weather conditions.

3.2.2.2 No-Action Alternative

There would be **no impact** to air quality issues if this alternative were selected.

3.2.3 Cumulative Effects on Air Quality

No cumulative impacts on Air Quality are expected due to implementation of the Proposed Action or the No-Action Alternative. Construction and demolition is a normal part of base operations and is included in the air pollution emission inventory for Scott AFB.

3.3 NOISE

3.3.1 Affected Environment

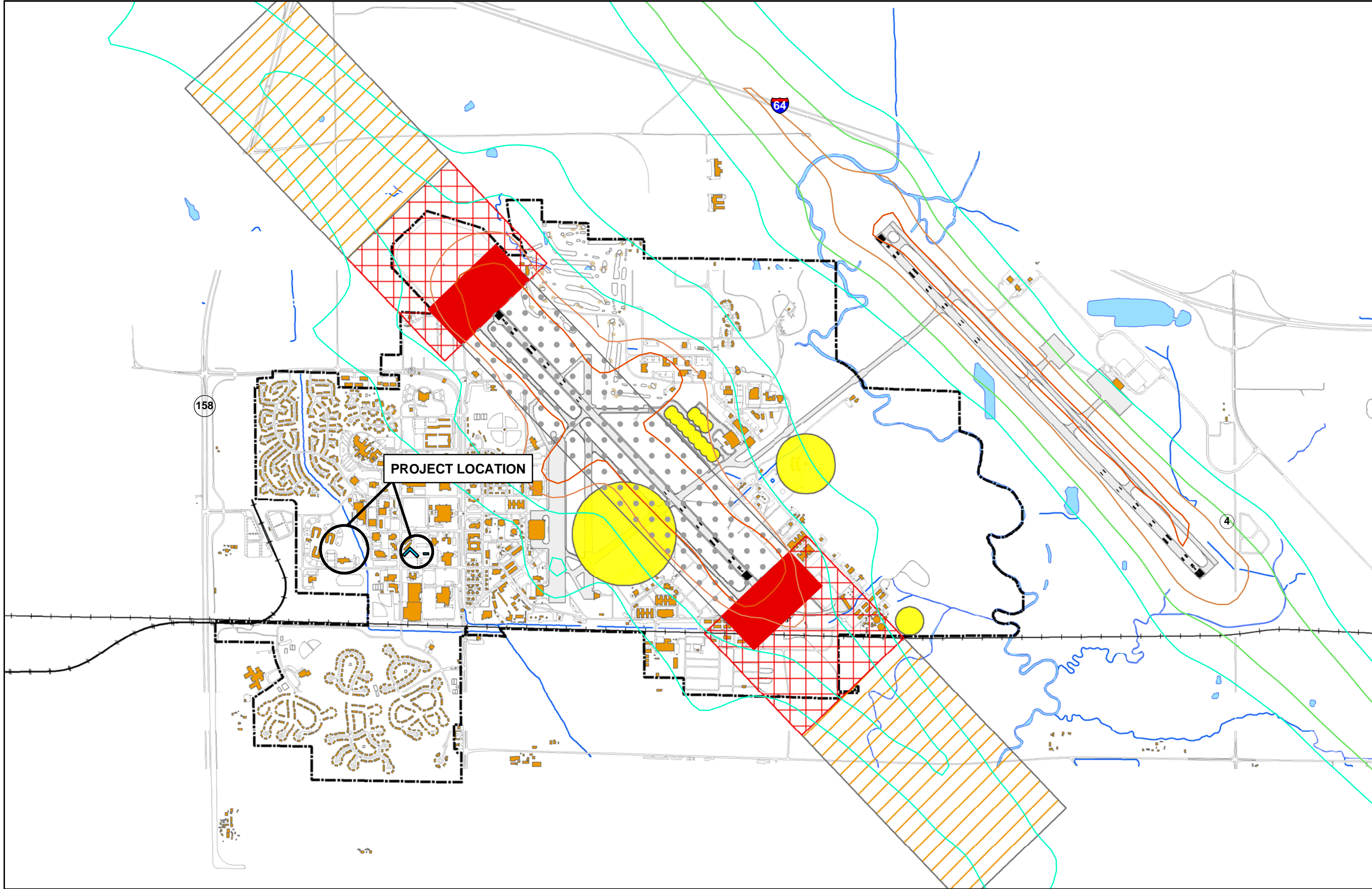
Department of Defense Instruction 4165 establishes and requires military departments to develop, implement, and maintain an Air Installation Compatible Use Zone (AICUZ) program for installations with flying operations. AFI 32-7063, *AICUZ Program* sets forth the policy, responsibilities, and requirements of the program. Topics covered include program objectives, responsibilities, land use compatibility guidelines, AICUZ studies, and updating. This program is designed to provide information on flight operations and compatibility guidelines to local planners to help them mitigate the noise impacts of military aircraft operations. The AICUZ program uses information on aircraft types, flight patterns, power settings, numbers of operations, and time of day or night to estimate average busy-day noise levels. This estimation is accomplished by using the NOISEMAP computer model and the results are expressed in terms of the day-night average sound level. The latest AICUZ was completed in February 2001. Noise level contours based on the computer noise model NOISEMAP indicate the noise levels at the location of the Proposed Action to be less than 65 decibels (dB) (Figure 3-1).

3.3.2 Environmental Consequences

3.3.2.1 Proposed Action

Implementation of the Proposed Action would generate **short-term, minor adverse impacts** throughout the construction and demolition phase of the project. The amount of noise generated from construction and operational activities would be negligible and temporary. Post-construction noise levels in the vicinity of the Proposed Action would remain at pre-construction levels.

This page intentionally left blank



OVERVIEW MAP

LEGEND

- BASE BOUNDARY
- AIRFIELD SURFACE
- BUILDINGS
- QD AREA
- GRADED CLEAR ZONE
- APZ 1
- CLEAR ZONE
- PRIMARY SURFACE
- SURFACE WATER
- STREAM
- RAILROADS

NOISE CONTOURS

- 65 dB
- 70 dB
- 75 dB
- 80 dB

1,000 500 0 1,000 Feet

Construction of New Dormitory
Scott Air Force Base

Figure 3-1.
Operational Constraints

This page intentionally left blank

3.3.2.2 No-Action Alternative

There would be **no impact** from noise-related issues if this alternative were selected.

3.3.3 Cumulative Effects on Noise

No cumulative impacts associated with noise are anticipated following the implementation of the Proposed Action or the No-Action Alternative.

3.4 WASTES, HAZARDOUS MATERIALS, AND STORED FUELS

3.4.1 Affected Environment

Executive Order 12580, adopted in 1987, gave various federal agencies, including the Department of Defense, the responsibility to act as lead agencies for conducting investigations and implementing remediation efforts when they are the sole or co-contributor to contamination on or off their properties. To ensure compliance with the Comprehensive Environmental Response, Compensation, and Liability Act, its regulations, and Executive Order 12580, the DoD developed the Installation Restoration Program (IRP), under the Defense Environmental Restoration Program (ERP), to identify potentially contaminated sites, investigate these sites, and evaluate and select remedial actions accordingly.

A review of ERP records indicated that no ERP sites or Areas of Concern (AOC) are known to exist at the location of the Proposed Action.

Eleven ERP/AOC sites are listed as occurring within 0.5 mile of the proposed dormitory. These include:

AOC02 – Basewide Polychlorinated Biphenyls (PCB) Spills

Basewide there are nine (9) locations where PCBs or PCB-contaminated fluids may have leaked or been spilled during use or while in storage at Scott AFB. PCBs and PCB containing materials are regulated under the Toxic Substance Control Act (TSCA) of 1976, 10 CFR part 761. Preliminary Assessments have been performed on these nine (9) PCB fluid release sites. The purpose of the investigations was to collect information concerning conditions at the PCB sites, assess the threat posed to human health and the environment, and determine the need for additional investigation under TSCA. Four AOC02 sites are located within 0.5 miles of the subject property. The closest site is located approximately 260 feet northeast of the subject property (Figure 3-2).

AOC03 – Hospital Incinerator

The Hospital Incinerator, AOC03, was located on the fifth floor in Building 1530, the Base Hospital. Conventional trash was initially burned in the incinerator until it reached its operating temperature of 1400° F. The incinerator operated from the late 1940s until it was replaced in 1982 with a unit that burned propane. Materials disposed of in this incinerator included infectious and pathological wastes and spent needles. The resulting ash from the incinerator was disposed of in the Base Landfill until the landfill was closed. After the Landfill closure the ash

was disposed of off-site. In 1999, the incinerator was removed. The former location of the incinerator is located approximately 2,300 feet north of the project sites.

AOC06 – Basewide Oil/Water Separators

There are 15 oil/water separators basewide that were in operation from the 1960s until 1994. Three of these sites are located within 0.5 miles of the site of the Proposed Action.

AOC18 – Basewide Coal Storage Piles

A Preliminary Assessment/Site Investigation is currently underway for coal storage piles at Scott AFB. One such site was located north of South Drive and east of Grant Street near a former boiler plant. A site survey and soil boring were conducted at this site. The investigation is anticipated to be finished by March 2006. The site is located approximately 405 feet northwest of the project site.

SS06 – AAFES Service Station (Building 1965)

SS-06 is the site of the former Army Air Force Exchange Service (AAFES) service station. It is not known when the service station was closed but gasoline, diesel, and waste oil tanks were reportedly removed in 1999. The site contained three 10,000-gallon gasoline tanks, one 2,000-gallon diesel fuel tank and one 550-gallon waste oil tank. Two of the gasoline tanks were reported to have contained leaks. Site investigations for this site are described below.

Soil and groundwater investigations were conducted at the site during the 1980's and 1990's (City Design Group, 2003). These surveys collected soil and groundwater samples. Analysis of samples from these studies indicated that the groundwater and sub-surface soils contain excessive levels of petroleum related contaminants. An additional study was conducted in 2003 to establish worker protection guidelines for the installation of a storm sewer. A limited number of soil bores were taken along the proposed path of the storm sewer. The results of this study indicated that portions of the site had elevated levels of petroleum related contaminants. The study also indicated that soils within the site may have elevated levels of contaminants and would not be suitable for backfill. The *Final Site Specific Planning Documents* (Tetra Tech, 2004) outlines the design of the remedial investigation/feasibility study (RI/FS) that is currently underway at SS-06.

OT08 - Former Dental Clinic (Building 1680)

The dental clinic was used from the 1940s until 1984. Mercury-containing dental amalgams were routinely disposed of in sink drains. Due to leaks, the soil under the building became contaminated. The dental clinic is located over 900 feet to the northeast of the proposed dorm and 400 feet northwest of the demolition site.

Asbestos-Containing Materials (ACM) and Lead-Based Paint (LBP)

Building 1912 was constructed in 1969 and was extensively renovated in the 1990's. Building 1899 was constructed in 1987 and renovated in the early 2000's. It is not anticipated that ACM or LBP are present in either building. An ACM and LBP survey would be performed prior to any demolition to confirm the absence of these materials.

Underground Storage Tanks (UST)

Two UST sites were identified within 0.5 miles of the location of the Proposed Action. These sites, also identified as ST-10, are known sites of leaking USTs. The closest site is located approximately 700 feet south of the project site.

3.4.2 Environmental Consequences

3.4.2.1 Proposed Action

The Proposed Action is located within 0.5 miles of four types of ERP/AOC sites. The sites are evaluated below.

AOC02 – Basewide PCB Spills

Four AOC02 sites are located in the vicinity of the proposed construction site. The closest AOC02 is located approximately 250 feet to the northeast of the subject site. The site is separated from the AOC by Ash Creek and it is not anticipated that contamination from the AOC would impact the subject site.

AOC03 – Hospital Incinerator

AOC03 is located approximately 2,400 feet north of the subject site and is not anticipated to impact the subject site.

AOC06 – Basewide Oil/Water Separators

Three AOC06 sites are located in the vicinity of the proposed construction site. The closest AOC02 is located approximately 1,000 feet south of the subject site. Due to the distance separating the AOC from the subject site, no impacts are anticipated.

AOC18 – Basewide Coal Storage Piles

The former coal storage pile nearest to the proposed construction site is located approximately 1,100 feet to the southeast. Due to the distance separating the AOC from the subject site, no impacts are anticipated.

SS06 – AAFES Service Station (Building 1965)

SS06 is located approximately 2,000 feet southeast of the proposed construction site. Due to the distance separating the AOC from the subject site, no impacts are anticipated.

OT08 - Former Dental Clinic (Building 1680)

OT08 is located approximately 800 feet to the west northwest of the proposed construction site. Due to the distance separating the AOC from the subject site, no impacts are anticipated.

Asbestos-Containing Materials (ACM) and Lead-Based Paint (LBP)

It is not anticipated that Building 1912 or 1899 contain ACM or LBP. If these materials are found to be present, they will be disposed of in accordance with State and Federal regulations.

Asbestos-containing materials, LBP, paints containing chromate, and/or transformers containing PCB fluid are prohibited from use during implementation of the Proposed Action.

Noncompliance could generate Notices of Violation for Scott AFB and legal action could be implemented against the accountable contractor.

Underground Storage Tanks (UST)

The UST sites are located downgradient from the site of the Proposed Action. Therefore, no impacts are anticipated from these sites.

Hazardous materials such as petroleum products used during construction activities would be restricted and the generation of hazardous waste is not anticipated. If a contractor cannot avoid generating hazardous waste, the waste must be disposed of according to contract specifications and environmental laws. Improper usage of hazardous materials or disposal of hazardous wastes during construction activities could result in Notices of Violation from the IEPA, leading to possible fines and litigation.

3.4.2.2 No-Action Alternative

There would be **no impact** to the environment from wastes or hazardous materials, if the No-Action Alternative were selected.

3.4.3 Cumulative Impacts to Wastes, Hazardous Materials, and Stored Fuels

No cumulative impacts are anticipated to Wastes, Hazardous Materials, and Stored Fuels as a result of implementing the Proposed Action.

3.5 WATER RESOURCES

3.5.1 Affected Environment

3.5.1.1 Surface Water Resources

Scott AFB is located within the Lower Kaskaskia Watershed in St. Clair County. Streams located within Scott AFB include Ash and Silver Creek. Ash Creek originates approximately one mile northwest of the base near Shiloh, Illinois. From its origin, Ash Creek flows through the base and abuts the rear of the former commissary before discharging into Silver Creek. Silver Creek forms the eastern boundary of Scott AFB. The creek has steep mud banks, low stream gradient, and turbid water. The drainage area of Silver Creek, which encompasses approximately 395 square miles upstream of Scott AFB, consists primarily of farmland. Scott AFB is also drained by overland flow to diversion structures, field tiles, storm sewers, drainage ditches, and culverts. About 60 percent of the base is drained by Silver Creek and the remaining area is drained by Ash Creek (Woolpert, 2002).

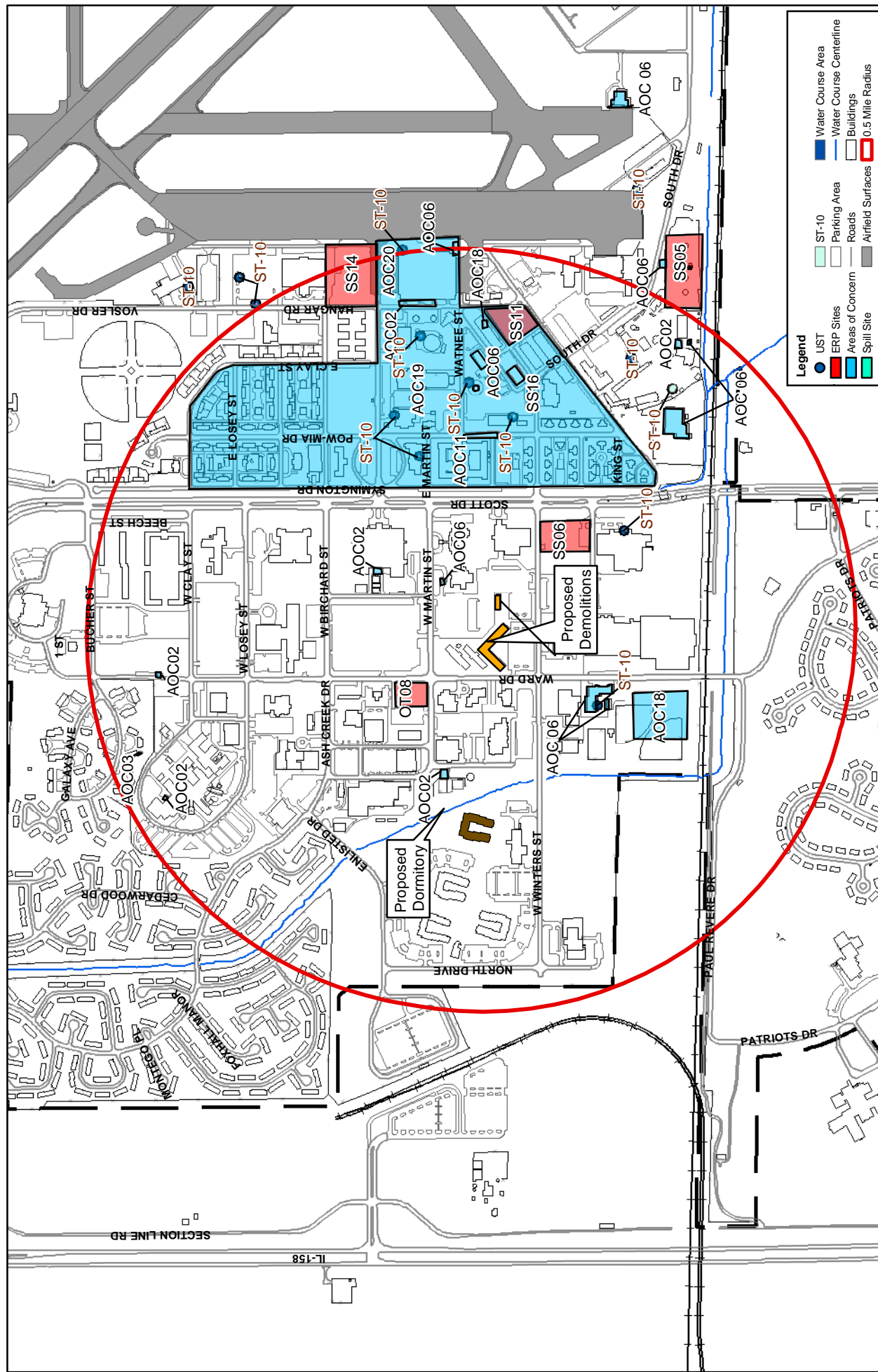
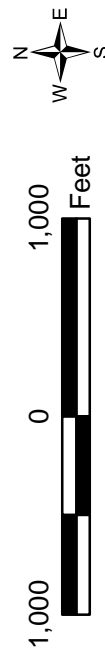


Figure 3-2.
Installation Restoration
Program and Areas of
Concern

Construction of New Dormitory Scott Air Force Base



3.5.1.2 Floodplains

Executive Order 11988 dated May 24, 1977; entitled “Floodplain Management” defines a floodplain and establishes a policy of avoiding impacts to floodplains when practicable. Facility design and construction, real property acquisition, maintenance activities, real property disposal, and natural resource program implementation actions must comply with EO 11988. The basis for this guidance includes the CAA of 1977, 33 USC 1251 et seq., NEPA, 42 USC 4321. et. seq., the *National Flood Insurance Act of 1968*, 42 USC 4001, et seq., the *Flood Disaster Protection Act of 1973*, and Public Law 93-235, 87 Statute 975. Floodplains at Scott AFB are primarily located adjacent to Silver Creek near the eastern boundary of the base (Figure 3-3).

3.5.1.3 Groundwater Resources

Scott AFB is situated in an area of southwestern Illinois that lacks aquifers of regional significance. The significant hydrogeologic units present in the area include alluvium containing sand and gravel lenses, sand and gravel layers within the glacial deposits, and sandstone or other permeable strata within the bedrock. Water quality varies greatly, with water from the surficial deposits usually of slightly better quality than water from the bedrock units. Precipitation is the primary source of groundwater recharge in the area.

3.5.1.4 Water Use and Treatment

The CAA regulates water quality. These regulations are found at 40 CFR, Subchapter D. Due to the lack of significant groundwater resources, most communities in St. Clair County, including Scott AFB, obtain their water from the Mississippi River through the Illinois-American Water Company. No drinking water wells are known to be in use within the boundaries of Scott AFB. However, domestic and agricultural users within approximately 10 miles of the base obtain a limited amount of water from shallow aquifers.

An on-site sewage treatment plant serves Scott AFB with a capacity of two million gallons per day (mgd). The sewage flow averages about 1.45 mgd. The plant provides tertiary treatment, and the effluent is discharged to a tributary of Silver Creek at the southeast part of the base (Woolpert, 2002).

3.5.1.5 Wetlands

The CAA, noted earlier in this section, sets the basic structure that regulates discharges and dredged materials that could enter wetlands. There are many other laws and regulations, such as the *Federal Agriculture Improvement and Reform Act*, the *North American Wetlands Conservation Act*, and the *Endangered Species Act*, that are applicable to wetlands protection. By definition, wetlands are transitional lands between terrestrial and aquatic systems where the water table is usually at the surface or the land is covered by shallow water. Wetlands generally include swamps, marshes, bogs, and similar areas.

The largest area of wetlands at Scott AFB is located within the bottomland forest adjacent to Silver Creek (Figure 3-3). Other wetland resources located at Scott AFB include those located adjacent to Ash Creek and a number of ponds and depressional wetlands scattered throughout the base.

3.5.2 Environmental Consequences

3.5.2.1 Proposed Action

No adverse impacts to surface water or groundwater quality are anticipated from the implementation of the Proposed Action. Review of Federal Emergency Management Agency flood maps, base wetland maps, and an on-site preliminary survey indicated that no floodplains or wetlands were present at the sites of the Proposed Action. As a result, the action would have **no impact** to existing wetlands or floodplains. All appropriate measures and best management practices would be taken during demolition activities to minimize erosion and control sedimentation.

3.5.2.2 No-Action Alternative

There would be **no impact** to surface water, groundwater, wetlands, or floodplains if this alternative were selected.

3.5.3 Cumulative Impacts to Surface Water Resources

No cumulative impacts to surface water resources are anticipated as a result of implementing the Proposed Action or No-Action Alternative.

3.6 BIOLOGICAL RESOURCES

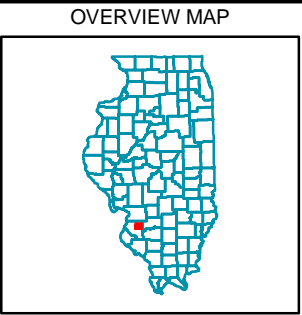
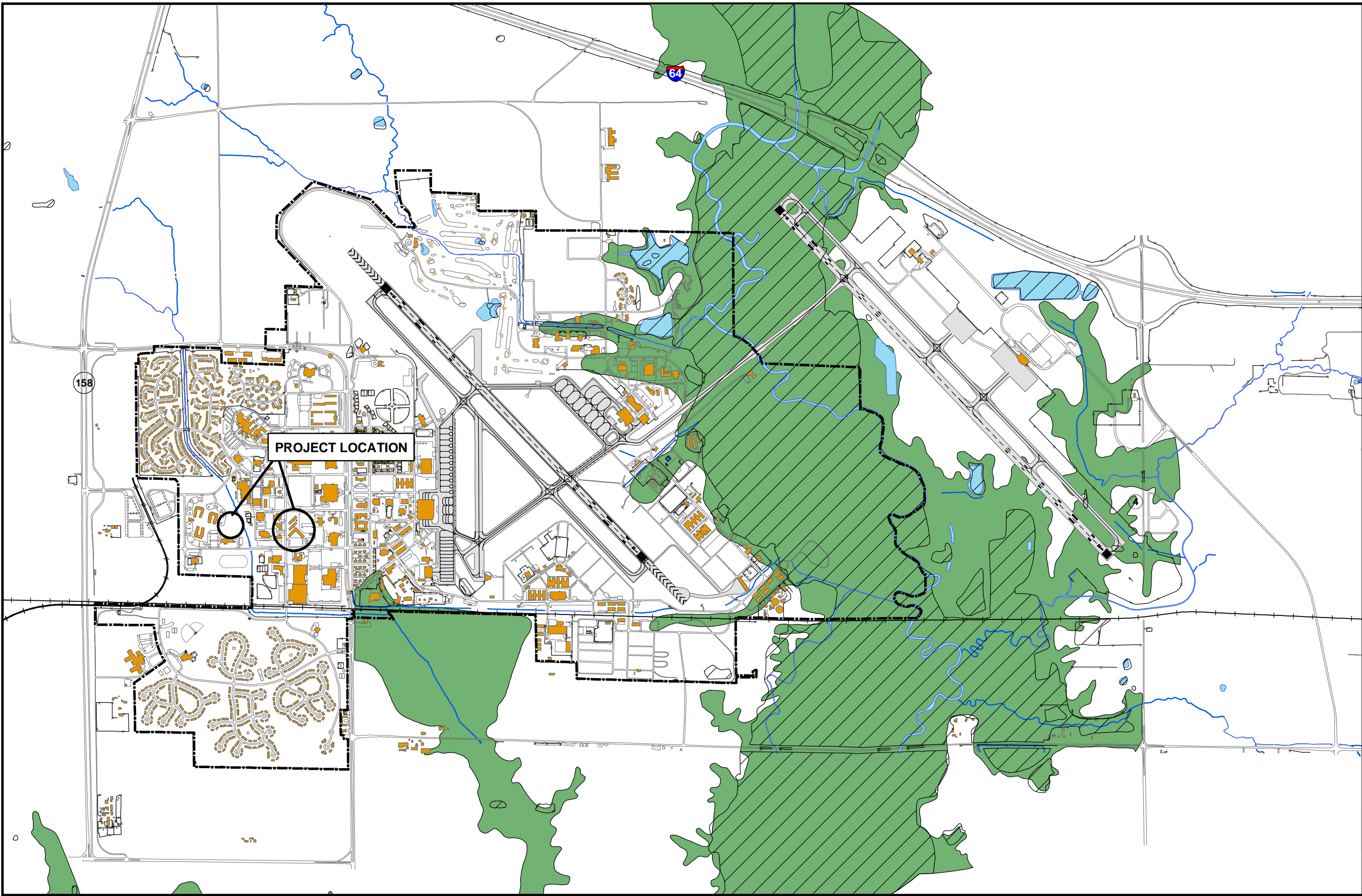
3.6.1 Affected Environment

Air Force Instruction 32-7064, *Integrated Natural Resources Management*, and the *Endangered Species Act* address biological resources. No plants listed as endangered by the Illinois Endangered Species Protection Board were found within the study site during botanical surveys conducted on September 19, 2001. Although no botanical endangered species were discovered, suitable habitat does exist for both state and federally listed species within the Scott AFB boundaries.

A single federally endangered Indiana bat (*Myotis sadalis*) was captured during a study conducted by personnel from the U.S. Engineer Research and Development Center in July 2001. The Indiana bat was identified along Silver Creek near the confluence of Carolina Creek (USAERDC, 2002). Although suitable habitat for the Indiana bat is found at Scott AFB, none exists in the vicinity of the Proposed Action.

The only state endangered animal species identified at Scott AFB is the little blue heron. The presence of a little blue heron was incidentally noted during the 2001 bird survey. The little blue heron is not present at the site of the Proposed Action, nor does any suitable habitat for the little blue heron exist in the vicinity of the Proposed Action.

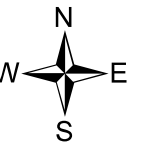
This page intentionally left blank



- LEGEND**
- BASE BOUNDARY
 - AIRFIELD SURFACE
 - WETLAND
 - BUILDINGS
 - 100-YEAR FLOOD
 - SURFACE WATER
 - STREAM
 - FENCE LINES
 - RAILROADS



1,000 500 0 1,000
Feet



Construction of New Dormitory
Scott Air Force Base

Figure 3-3.
Wetlands and Floodplains

This page intentionally left blank

3.6.2 Environmental Consequences

3.6.2.1 Proposed Action

There are no significant biological resources located at the site of the Proposed Action. Therefore, **no adverse impacts** to biological resources are anticipated from implementation of the Proposed Action.

3.6.2.2 No-Action Alternative

No impacts to biological resources would result from the implementation of this alternative.

3.6.3 Cumulative Impacts to Biological Resources

There are no significant biological resources located at the site of the Proposed Action. Therefore, **no cumulative impacts** to biological resources are anticipated as a result of implementing the Proposed Action or No-Action Alternative.

3.7 SOCIOECONOMIC RESOURCES

3.7.1 Affected Environment

Socioeconomic resources are described in this section using demographic and employment measures, which are key factors influencing housing demand, education needs, and infrastructure requirements. Implementation of the Proposed Action would affect a relatively small number of personnel, and the socioeconomic impacts of the action would be confined primarily to the employment and income generated from demolition activities.

The Location and Region of Influence (ROI) for the Proposed Action is Scott AFB, located in St. Clair County, Illinois, approximately 20 miles east of the City of St. Louis, Missouri. The base covers approximately 3,600 acres and is located in a predominantly agricultural area. The base is immediately south of Interstate Highway 64 (Figure 1-1), near the cities of O'Fallon and Belleville. The socioeconomic ROI for an analysis of this type is generally defined by the residence patterns of current installation personnel, the number of personnel associated with the action under consideration, and the value of any construction associated with the action. Construction firms and workers are expected to originate from O'Fallon, Illinois or other regions surrounding Scott AFB.

The population of St. Clair County in 2000 was 256,599 (U.S. Census Bureau, 2000). There are approximately 13,124 persons employed by Scott AFB (7,599 military, 5,525 civilians) (375 CES, 2004). In addition, the base supports approximately 21,819 active duty, Guard, Reserve, and retiree personnel (375 CES, 2004). The total Scott AFB community, on- and off-base, comprises approximately 34,100 military and civilian personnel and their families (375 CES, 2004).

3.7.2 Environmental Consequences

3.7.2.1 Proposed Action

Short-term positive impacts for the construction industry and local economy are anticipated from implementation of the Proposed Action. The construction of a replacement dormitory is not anticipated to significantly increase long-term employment at the base and as such there would be **no long-term socioeconomic impacts** as a result of implementing the Proposed Action.

3.7.2.2 No-Action Alternative

There would be **no impacts** to socioeconomics if the No-Action Alternative were implemented.

3.7.3 Cumulative Impacts to Socioeconomics

No cumulative impacts to socioeconomics are anticipated as a result of the Proposed Action or No-Action Alternatives.

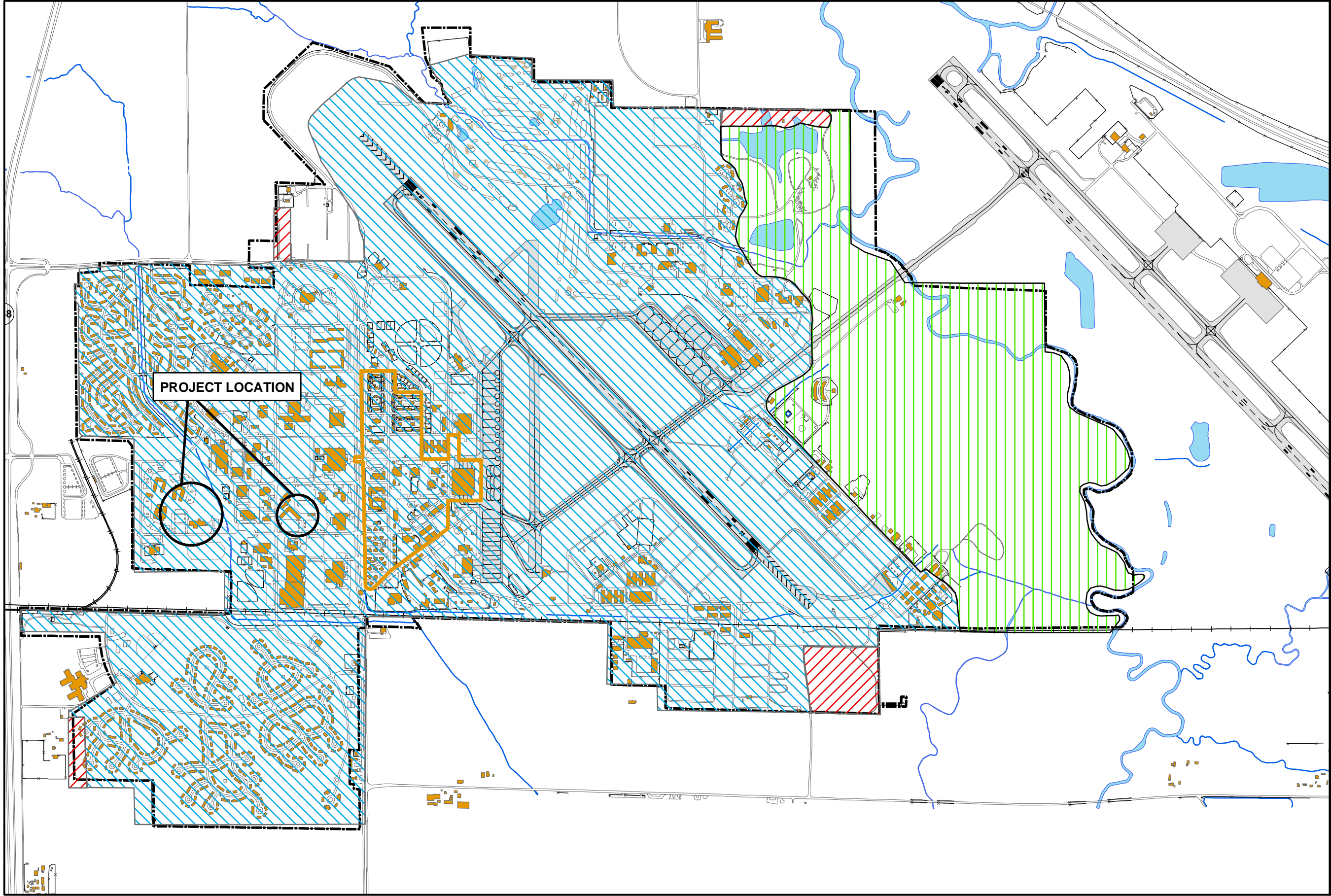
3.8 CULTURAL RESOURCES

3.8.1 Affected Environment

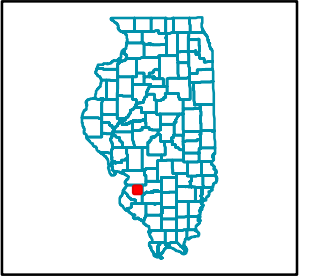
Historical and cultural resources are protected under the *National Historic Preservation Act* (16 USC 470a-470w), EO 11593, *Protection and Enhancement of the Cultural Environment*, the *Archaeological and Historic Preservation Act* (16 USC 469-469c), the *Historic Sites Act* (16 USC 461-467), and the *Illinois State Agency Historic Resources Preservation Act*. Federal agencies must provide an opportunity for comment and consultation with the Illinois Historic Preservation Agency and the Advisory Council on Historic Preservation when an action has the potential to affect historic or cultural sites. AFI 32-7065, *Cultural Resources Management*, must be complied with as well.

The National Park Service conducted an archaeological assessment of Scott AFB in 1992. Archaeological potential for the site of the Proposed Action is identified as being “highly disturbed” (Figure 3-4) and identified in the report as having “an extremely low potential for the identification of additional cultural resources.”

Previous archaeological and historical studies of Scott AFB did not identify any historical resources, e.g., historical buildings, archaeological sites, or monuments, at the site of the Proposed Action (Thomason, 1992; National Park Service, 1992).



OVERVIEW MAP

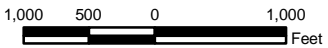


LEGEND

- BASE BOUNDARY
- HISTORIC DISTRICT
- AIRFIELD SURFACE
- BUILDINGS
- SURFACE WATER
- STREAM
- RAILROADS
- FENCE LINES

ARCHAEOLOGICAL POTENTIAL

- LOW
- MODERATE
- HIGHLY DISTURBED AREA



Construction of New Dormitory
Scott Air Force Base

Figure 3-4. Cultural Resources

This page intentionally left blank

3.8.2 Environmental Consequences

3.8.2.1 Proposed Action

The buildings that are scheduled for demolition are not eligible for listing on the National Register of Historic Places. Therefore, **no impacts** are anticipated from implementation of the Proposed Action. No known archaeological resources occur in the vicinity of the Proposed Action; however, the discovery of an artifact or historical object would require all construction activities to cease until the Cultural Resource Specialist and/or the Base Historian is notified. Construction activities must not proceed until the aforementioned personnel provide approval. Archaeological resources on either public or Native American lands cannot be excavated, removed, damaged, or otherwise altered without a permit (32 CFR 229.4(a)(5)(b)) and approval from the Cultural Resources Specialist at Scott AFB.

3.8.2.2 No-Action Alternative

There would be **no impact** to cultural and/or historical resources if the No-Action Alternative were selected. If construction and demolition activities do not occur, there would be no possibility of excavating any type of cultural resource, i.e. artifact, as part of this project.

3.8.3 Cumulative Impacts to Cultural Resources

No cumulative impacts are anticipated as a result of implementing the Proposed Action or the No-Action Alternative.

3.9 LAND USE

3.9.1 Affected Environment

Originally, the land in the vicinity of Scott AFB was vegetated by tall grass prairie and mixed hardwood forest. Before the government acquired it, the primary land use was agriculture. Since that time, land management has included construction sites, residential and commercial use and permanent mowed turf grass (INRMP, 2002). Land cover at the site of the Proposed Action consists of mowed turf grass. The BGP classified land use in the vicinity of the both the existing and new dormitory as housing (unaccompanied) (Figure 3-5). Major projects proposed in the immediate vicinity of the Proposed Action include:

- Complete demolition of 1899
- Construction of Joint Use Facility
- Addition to USTRANSCOM (Bldg 1900)
- Demolition of Bldg 1970 and construction of a parking lot, and
- Construction of the Surface Deployment Distribution Command Temporary Facility

3.9.2 Environmental Consequences

3.9.2.1 Proposed Action

Construction of the proposed dormitory would consolidate unaccompanied housing, while demolition of building 1912 and 1899 would provide needed administrative space in the central portion of the base. Both of these actions are in accordance with the BGP and serve to improve both housing and administrative land uses. Therefore, these conversions would result in a **short- and long-term positive impact** to land use.

3.9.2.2 No-Action Alternative

There would be **short- and long-term adverse impacts** to land use if this alternative were implemented. Building 1912 would remain in a portion of the based planned for administrative space and the dormitory would not be collocated with other dorm facilities in accordance with the Dormitory Master Plan.

3.9.3 Cumulative Impacts to Land Use

Although several projects are planned in the vicinity of the Proposed Action, **no cumulative impacts** are anticipated to land use as a result of implementing the Proposed Action or No-Action Alternative or from implementing any of the potential projects.

3.10 TRANSPORTATION SYSTEMS

3.10.1 Affected Environment

The location of the proposed dormitory is located south of North/Enlisted Drive and north of West Winters Street. Building 1912 is located near the intersection of Ward Drive and West Winters Street. West Winters Drive is a primary road that provides access to several commercial and service facilities. Traffic includes semi-trailer trucks, construction vehicles, and government and privately owned vehicles.

3.10.2 Environmental Consequences

3.10.2.1 Proposed Action

Short-term minor increases in traffic and traffic congestion are anticipated from implementation of the Proposed Action. Traffic restrictions would occur along Ward Drive, Bucher and Birchard Streets. Construction traffic and road constriction is anticipated to have a **short-term minor adverse impact** to the public, pending completion of the Proposed Action. The proposed action is anticipated to improve traffic flow along Ward Drive. Therefore the Proposed Action would lead to a **long-term positive impact** to transportation.

3.10.2.2 No-Action Alternative

Failure to implement the Proposed Action would result in a **long-term adverse impact** to the transportation system at Scott AFB. Traffic flow in the vicinity of Ward Drive and Winters Street currently exceeds acceptable levels. It is anticipated that the number of personnel and traffic at Scott AFB will continue to increase and without improvements traffic congestion would also increase.

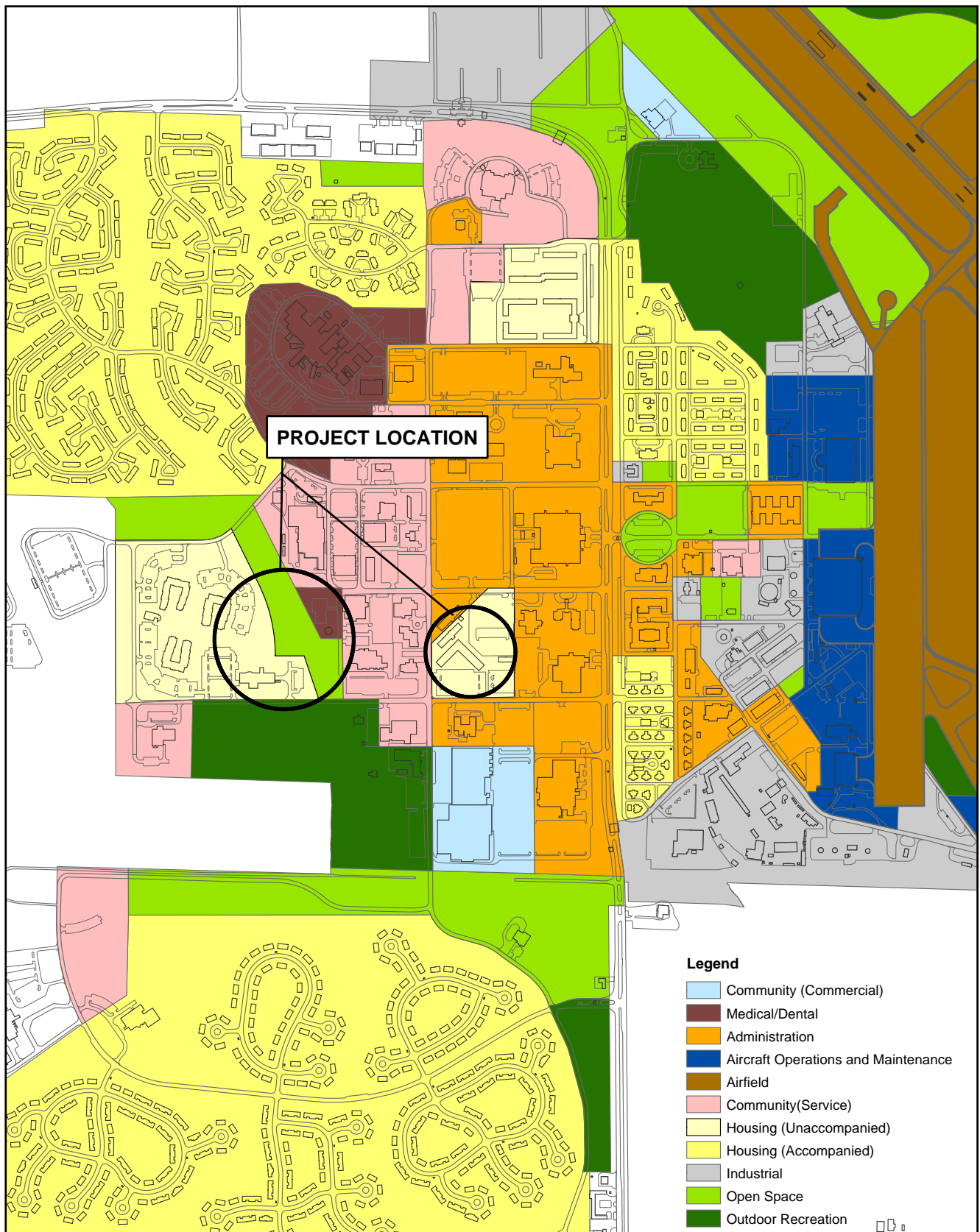
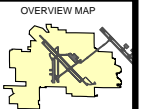


Figure 3-5.
Existing Land Use

Construct New Dormitory
Scott Air Force Base



0 250 500
Feet



3.10.3 Cumulative Impacts to Transportation

No cumulative impacts are anticipated to transportation as a result of implementing the Proposed Action.

3.11 AIRSPACE/AIRFIELD OPERATIONS

3.11.1 Affected Environment

Unified Facilities Criteria (UFC) 3-260-01 (formerly AFI 32-1123) states that to meet specific airspace/airfield operations criteria, new construction must be more than 1,000 feet from the runway centerline, and constructed structures should be under a 7:1 ratio from the 1,000-foot line. The UFC also states that new facilities must be constructed at least 125 feet from the edge of all existing aircraft parking aprons to meet the apron clearance criteria specified in UFC 3-260-01. UFC 3-260-01 also created clear zones at either end of a runway. These clear zones are areas that possess a high potential for accidents and their use is restricted to be compatible with aircraft operations. The clear zone consists of two distinct areas, the graded area and a land use control area (Figure 3-1). The graded area of the clear zone is prepared and maintained as an aircraft safety area. The remainder of the clear zone is a land use control area intended to protect people on the ground. AFI 32-7063 *Air Installation Compatible Use Zone Program* indicates that existing Air Force Facilities may continue in the clear zone; however, the Base Civil Engineer should program replacement facilities as part of the normal planning and programming program. These replacement facilities would be placed outside of the clear zone. None of the area encompassed by the Proposed Action is located within the land use control area clear zone (Figure 3-1).

3.11.2 Environmental Consequences

3.11.2.1 Proposed Action

No portion of the Proposed Action is located within airfield clear zones and would have **no impact** on airspace/airfield operations.

3.11.2.2 No-Action Alternative

No impacts are anticipated to airspace/airfield operations as a result of implementing the No-Action Alternative.

3.11.3 Cumulative Impacts to Airspace/Airfield Operations

There are **no cumulative impacts** anticipated to airspace/airfield operations as a result of implementing the Proposed Action or No-Action Alternative.

3.12 SAFETY AND OCCUPATIONAL HEALTH

3.12.1 Affected Environment

Factors involving primary occupational safety and health issues are addressed in 29 CFR Occupational Safety and Health Standards. The Department of Labor administers these regulations, which are applicable at construction sites and buildings at Scott AFB. If the Proposed Action is implemented, all applicable provisions of the Corps of Engineers Manual EM 385-1-1, "General Safety Requirements," must be followed.

3.12.2 Environmental Consequences

3.12.2.1 Proposed Action

Implementation of the proposed action would result in **short-term and long-term positive impacts** to safety and security. The positive impacts are a result of fire safety and security improvements to the new dormitory and to the traffic improvements along Ward Street. **No adverse impacts** to the health of occupational and construction workers are anticipated to occur with implementation of the Proposed Action, provided they comply with Occupational Health and Safety Administration (OSHA) regulations and standards during construction activities.

3.12.2.2 No-Action Alternative

There would be potential **short-term and long-term adverse impacts** to fire safety and security if the No-Action Alternative were implemented. The adverse impacts would result from the lack of safety and security measures in the existing dormitories and traffic congestion along Ward Street.

3.12.3 Cumulative Impacts to Safety and Occupational Health

No cumulative impacts are anticipated to Safety and Occupation Health as a result of implementing the Proposed Action or No-Action Alternative.

3.13 ENVIRONMENTAL MANAGEMENT, POLLUTION PREVENTION

3.13.1 Affected Environment

The United States Air Force (USAF) recognizes the importance of pollution prevention (P2) in protecting the environment, achieving compliance objectives, and reducing waste disposal costs. Such successful P2 programs as recycling, waste minimization, product substitution, and process changes, among others, are planned or underway at Air Force installations worldwide. The Air Force's environmental programs must do more today than ever before, and with increased cost-effectiveness.

Most tenant activities at Scott AFB participate in the recycling program. If the Proposed Action were implemented, the selected contractor would participate as well. All ferrous and non-ferrous metals from the project must be recycled. The contractor would also recycle general administrative refuse associated with this project. This refuse may include cardboard, mark 1 and 2 plastic bottles, metals, glass, aluminum and steel cans, and mixed paper. All recyclable

material must be turned into the Base Recycling Center located at Building 3286. Hours of operation are 0730 to 1500 Monday through Friday and 0730 to 1100 on Saturdays.

3.13.2 Environmental Consequences

3.13.2.1 Proposed Action

In support of national environmental efforts, the contractor would recycle all ferrous and non-ferrous metals from the project. The contractor would also recycle general administrative refuse associated with this project. This refuse includes cardboard, mark 1 and 2 plastic bottles, glass, aluminum and steel cans, and mixed paper. The Base Recycling Center, Building 3286, on South Drive will accept these items Monday through Friday between 0730 and 1500 and Saturdays between 0730 and 1100. The use of 'green' products, reuse/recycling, and minimization of solid or hazardous waste would be encouraged during demolition activities at the sites of the Proposed Action as part of the Affirmative Procurement Plan.

Implementation of the Proposed Action would have **no impacts** to pollution prevention or environmental management programs, provided the above guidelines are followed.

3.13.2.2 No-Action Alternative

If the No-Action Alternative were implemented, no construction activities would occur and **no impacts** to environmental management or pollution prevention programs would be anticipated.

3.13.3 Cumulative Impacts Environmental Management, Pollution Prevention

No cumulative impacts are anticipated to Environmental Management or Pollution Prevention as a result of implementing the Proposed Action or No-Action Alternative.

3.14 GEOLOGY AND SOILS

3.14.1 Affected Environment

Pennsylvanian bedrock underlies Scott AFB at a depth of approximately 85 feet. Underlying the Pennsylvanian bedrock is the Chesterian Series sandstone. There are no geologic outcrops at Scott AFB. Soils in the vicinity of the Proposed Action are described as Mascoutah silty clay loam with a 0-2 percent slope (USDA, 1978). Soils at the site of the Proposed Action have been highly disturbed by previous development.

3.14.2 Environmental Consequences

3.14.2.1 Proposed Action

Construction contractors will use erosion control measures consistent with the Natural Resources Conservation Service Illinois Urban Manual. Necessary measures and best management practices would be implemented to reduce soil erosion and siltation during demolitions. Interim measures to prevent erosion during demolition would be implemented and could include the installation of staked straw bales, sedimentation basins, and temporary mulching. Proper grading would be accomplished to allow water to flow from the roadway and into the drainage system, rather than standing and eroding the shoulder or pavement edge. All disturbed areas with

exposed soil would be mulched and seeded immediately upon completion of land disturbance activities.

Phase I of the National Pollutant Discharge Elimination System (NPDES) storm water program presently covers discharges from large construction activities disturbing five acres or more of land. Phase II of NPDES storm water program covers small construction activities disturbing between one and five acres. “Disturbance” refers to exposed soil resulting from activities such as clearing, grading, and excavating. Construction activities can include road building, construction of residential houses, office buildings, and industrial sites, and demolition. Implementation of the Proposed Action would disturb approximately five acres of land in the location of the proposed dorm and 1.5 acres in the vicinity of Building 1912.

Implementation of the Proposed Action would have **no impact** to soils or geological resources, provided all of the aforementioned recommendations are applied.

3.14.2.2 No-Action Alternative

There would be **no impact** to geological resources or soils if the No-Action Alternative were selected since the proposed project sites would remain undisturbed.

3.14.3 Cumulative Impacts to Geologic Resources

No cumulative impacts are anticipated to Geologic Resources as a result of implementing the Proposed Action or No-Action Alternative.

3.15 ENVIRONMENTAL JUSTICE

3.15.1 Affected Environment

St. Clair County is a large, demographically diverse county, with communities ranging from urban areas of East St. Louis and Belleville to small rural towns east and west of Scott AFB. The year 2000 population of St. Clair County was approximately 67.9 percent Caucasian and 34.3 percent minorities, with the predominant minority described as African-American; 2.2 percent of the county’s population is considered Hispanic (U.S. Census Bureau, 2000). There are no low-income or minority disadvantaged populations in the area of the Proposed Action.

3.15.2 Environmental Consequences

3.15.2.1 Proposed Action

There are no minorities or low-income populations in the areas of the Proposed Action; therefore, EO 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, is not applicable.

Implementation of the Proposed Action would have **no impact** to minority or low-income populations.

3.15.2.2 No-Action Alternative

The No-Action Alternative would have **no impact** to minority or low-income populations.

3.15.3 Cumulative Impacts Related to Environmental Justice

No cumulative impacts are anticipated to minorities or low income populations as a result of implementing the Proposed Action or No-Action Alternative.

3.16 SUMMARY OF ENVIRONMENTAL CONSEQUENCES

Table 3-4 provides a summary of the potential environmental impacts of the Proposed Action and the No-Action Alternative.

Table 3-4. Comparison of Environmental Consequences*

Environmental Resources	Proposed Action	No-Action Alternative
Air Quality	Short-term – Minor Adverse Impact Long-term – No Impact	Short-term – No Impact Long-term – No Impact
Noise	Short-term – Minor Adverse Impact Long-term – No Impact	Short-term – No Impact Long-term – No Impact
Socioeconomics	Short-term – Positive Impact Long-term – No Impact	Short-term – No Impact Long-term – No Impact
Land Use	Short-term – Positive Impact Long-term – Positive Impact	Short-term – Adverse Impact Long-term – Adverse Impact
Transportation Systems	Short-term – Minor Adverse Impact Long-term – Major Positive Impact	Short-term – No Impact Long-term – Adverse Impact
Occupation Safety and Health	Short-term – Positive Impact Long-term – Positive Impact	Short-term – Adverse Impact Long-term – Adverse Impact
Unavoidable Adverse Impacts	Short-term – Minor Adverse Impact Long-term – No Impact	Short-term – Adverse Impact Long-term – Adverse Impact

*Environmental resources having **no impact** have been excluded from this matrix.

3.17 UNAVOIDABLE ADVERSE IMPACTS

3.17.1 Proposed Action

There are several short-term unavoidable minor adverse impacts summarized in Table 3-4; however, there would be **no unavoidable significant adverse impacts** if the Proposed Action was implemented.

3.17.2 No-Action Alternative

The only **unavoidable adverse impacts** that would result if the No-Action Alternative were implemented are in the categories of land use and occupation safety and health. These impacts are summarized in Table 3-4.

4.0 REFERENCES

- 375 CES, *Scott Air Force Base General Plan*, Scott Air Force Base, Illinois. October 2004.
- Code of Federal Regulations, 14 CFR FAR, Part 150, Airport Noise Compatibility Planning.
- Department of the Air Force, Headquarters 375th Airlift Wing Air Mobility Command Scott AFB Illinois. *Integrated Natural Resources Management Plan for Scott AFB*. 2002.
- Engineering Science Inc., *Installation Restoration Program Phase I*, Atlanta. April 1985.
- ERM (Environmental Resources Management), *Installation Restoration Program Stage I Remedial Investigation/Feasibility Study, Vol. I*, draft report prepared by Headquarters Military Airlift Command, Scott Air Force Base, Illinois. 1989.
- Federal Emergency Management Agency. Flood Insurance Rate Map. St Clair County, Illinois. 1985.
- Federal Interagency Committee on Wetland Delineation. 1989.
- National Park Service, Interagency Archeology Services, *Archaeological Assessment of Scott Air Force Base, St. Clair County, Illinois*. 1992.
- SAIC, *Draft AOC 18 (Coal Storage Piles Basewide) AOC 19 (Lead Sites Basewide) Preliminary Assessment/Site Inspection Report*. Scott AFB, Illinois. July 2005.
- Thomason and Associates, *Inventory and Evaluation of Historic Buildings and Structures on Scott Air Force Base, Illinois*. June 1992.
- USAF Housing Division and Headquarters. *The U.S. Air Force Dormitory Master Plan for Scott AFB. Area Development Plan Recommendations Based on Condition and Functional Assessment of Enlisted Dormitories*. Headquarters Air Force, Housing Division and Headquarters (HQ USAF/ILEH) , Air Force Center for Environmental Excellence (HQ AFCEE). November 14, 2003.
- USAF Headquarters Military Airlift Command, Scott AFB, Illinois. *Final Environmental Impact Statement for Joint Military-Civilian Use of Scott Air Force Base, Illinois, Vol. 1, Impacts Analysis*. July 1991.
- U.S. Army Corps of Engineers, Omaha District. *Final Multi-Site Preliminary Assessment/Site Investigation for Scott AFB, Illinois*. October 1995.
- U.S. Army Engineer Research and Development Center. Environmental Laboratory. *Draft Environmental Assessment of Selected Fauna and their Habitats at Scott AFB Illinois: Bat Surveys, Seasonal Avian Inventories, and Botanical Survey of Forested Areas*. Vicksburg, Mississippi. Dec. 2001.

U.S. Census Bureau; St. Clair County QuickFacts <http://quickfacts.census.gov/qfd/states/17/17163.html>, 2000.

U.S. Department of Agriculture, Soil Conservation Service. *Soil Survey of St. Clair County, Illinois*. Illinois. Oct 1978.

U.S. EPA; National Ambient Air Quality Standards. <http://www.epa.gov/air/criteria.html> 2005.

Woolpert LLP, *Scott Air Force Base General Plan*. Dayton, Ohio. May 2002.

5.0 LIST OF PREPARERS

Brian Tutterow
SAIC, 8 years experience


This page intentionally left blank

6.0 PERSONS CONTACTED

Ms. Carolyn Byrd	375th CES/CEV Scott AFB, IL (618) 256-2122
Mr. Vtesh Chellappa	375th CES/CEV Scott AFB, IL (618) 256-2125
Ms. Laura Dods	375th CES/CEV Scott AFB, IL (618) 256-2186
Mr. Steve Handley	375th CES/CEV Scott AFB, IL (618) 256-2551
Ms. MaryAnn McCloskey	375th CES/CECP Scott AFB, IL (618) 256-3333
Mr. Mark McCoy	375th CES/CEV Scott AFB, IL (618) 256-2167
Mr. Mike Mackiewicz	375th CES/CEV Scott AFB, IL (618) 256-3452
Capt. Brandon Varilek	375th CES/CECP Scott AFB, IL (618) 256-3331

This page intentionally left blank

APPENDIX A
AIR FORCE FORM 813

REQUEST FOR ENVIRONMENTAL IMPACT ANALYSIS			Report Control Symbol RCS: 06-004			
INSTRUCTIONS: Section I to be completed by Proponent. Sections II and III to be completed by Environmental Planning Function. Continue on separate sheets as necessary. Reference appropriate item number(s).						
SECTION I – PROPONENT INFORMATION						
1. TO (Environmental Planning Function)		2. FROM (Proponent Organization and functional address symbol)			2a. TELEPHONE NO.	
375 CES/CEV		Kathryn Owen 375 CES 701 Hangar Rd			256-3259	
3. TITLE OF PROPOSED ACTION						
Construction of a New Dormitory						
4. PURPOSE AND NEED FOR ACTION (Identify decision to be made and need date)						
(see attached)						
5. DESCRIPTION OF ACTION AND ALTERNATIVES (DOPAA) (Provide sufficient details for evaluation of the total action)						
(see attached)						
6. PROPONENT APPROVAL (Name and Grade)		6a. SIGNATURE			6b. DATE	
SECTION II – PRELIMINARY ENVIRONMENTAL SURVEY (Check appropriate box and describe potential environmental effects including cumulative effects) (+ = positive effect; 0 = no effect; - = adverse effect; U = unknown effect)					+	0
7. AIR INSTALLATION COMPATIBLE USE ZONE/LAND USE (Noise, accident potential, encroachment, etc.)						X
8. AIR QUALITY (Emissions, attainment status, state implementation plan, etc.)						X
9. WATER RESOURCES (Quality, quantity, source, etc.)						X
10. SAFETY AND OCCUPATIONAL HEALTH (Asbestos/radiation/chemical exposure, explosives safety quantity distance, bird/wildlife aircraft hazard, etc.)						X
11. HAZARDOUS MATERIALS/WASTE (Use/storage/generation, solid waste, etc.)						X
12. BIOLOGICAL RESOURCES (Wetlands/floodplains, threatened or endangered species, etc.)						X
13. CULTURAL RESOURCES (Native American burial sites, archaeological, historical, etc.)						X
14. GEOLOGY AND SOILS (Topography, minerals, geothermal, Installation Restoration Program, seismicity, etc.)						X
15. SOCIOECONOMIC (Employment/population projections, school and local fiscal impacts, etc.)						X
16. OTHER (Potential impacts not addressed above.)						X
SECTION III – ENVIRONMENTAL ANALYSIS DETERMINATION						
17.		PROPOSED ACTION QUALIFIES FOR CATEGORICAL EXCLUSION (CATEX) # _____; OR				
X		PROPOSED ACTION DOES NOT QUALIFY FOR A CATEX; FURTHER ENVIRONMENTAL ANALYSIS IS REQUIRED.				
18. REMARKS						
(see attached)						
19. ENVIRONMENTAL PLANNING FUNCTION CERTIFICATION (Name and Grade)		19 a. SIGNATURE			19 b. DATE	
JOHN W. PATTERSON, P.E. Chief, Environmental Management					8 Feb 06	

4.0 PURPOSE AND NEED FOR ACTION

Construction of the building would comply with the United States Air Forces commitment to increasing privacy and improving unaccompanied housing.

5.0 DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES

5.1 Description of the Proposed Action

The new dormitory would be a three story facility located adjacent to Building 1820 in the southwest corner of the base. The facility will include 120 to 144 rooms, updated security, and improved amenities. The project would also include demolition of Building 1912, partial demolition of Building 1899, and roadway improvements along Ward Drive

5.2 Description of Alternatives

Off base housing

17.0 CATEX DESCRIPTION (if any)

18.0 REMARKS

APPENDIX B
SITE PHOTOGRAPHS

Location of the Proposed Dormitory



View facing north at the location of the proposed dormitory.



View facing northwest at the location of the proposed dormitory.



View facing west northwest at the location of the proposed dormitory.



View facing east across the location of the proposed dormitory at Building 1820. The proposed dormitory would be of similar design.

Building 1912



View facing northeast at Building 1912.



View facing north at Building 1912.



View facing west at Building 1912.

Building 1899



View facing northeast at Building 1899.



View facing southeast at Building 1899.



View facing southwest at Building 1899.



View facing northwest at Building 1899. Building 1912 is in the background.

APPENDIX C
PUBLIC COMMENTS

The Draft Environmental Assessment and Finding of No Significant Impact for the Construction of a New Dormitory was released for public comment from April 15, 2006 to April 30, 2006. The Public Notice as it appeared in the Belleville News Democrat is included below. No public comments were received.

PUBLIC NOTICE OF AVAILABILITY

Department of the Air Force
Scott Air Force Base
375th CEV

Notice of Availability of the Draft Environmental Assessment (EA) for the Construction of a New Dormitory St. Clair County, Scott Air Force Base, Illinois.

Pursuant to the National Environmental Policy Act (NEPA) of 1969 and the Council on Environmental Quality, a Draft EA has been prepared to analyze the potential impacts associated with the construction of a new dormitory. The existing dormitory does not meet the current Air Force standards for quality of life. The Draft EA is available for public review at the Belleville Public Library-Main Branch 121 East Washington Street, Belleville, Illinois.

Public Comments on the EA will be accepted for 15 days from the date of this notice. Written comments and inquiries on the EA should be directed to: 375th Airlift Wing, Public Affairs Office, Fax: (618) 256-8837, or E Mail 375AW.PA@SCOTT.AF.MIL

PRIVACY ADVISORY NOTICE

Your comments on this Draft Environmental Assessment are requested. Letters or other written comments provided may be published in the Final EA. Comments will normally be addressed in the Final EA and made available to the public. Any personal information provided will be kept confidential. Private addresses will be compiled to develop a mailing list for those requesting copies of the Final EA. However, only the names of the individuals making comments and their specific comments will be disclosed. Personal home addresses and phone numbers will not be published in the Final EA.

This page intentionally left blank

**FINDING OF NO SIGNIFICANT IMPACT TO
CONSTRUCT NEW DORMITORY
SCOTT AIR FORCE BASE, ILLINOIS**

Agency: United States Air Force, Headquarters, Air Mobility Command

Background: Pursuant to the President's CEQ regulations, {Title 40 Code of Federal Regulations (CFR) Parts 1500-1508}, the National Environmental Policy Act of 1969 {42 USC §4321, et seq.}, Air Force Instruction (AFI) 32-7061, and the Environmental Impact Analysis Process, as promulgated at 32 CFR Part 989, the U.S. Air Force conducted an Environmental Assessment (EA) of the potential consequences associated with the construction of a new dormitory at Scott AFB, IL. The EA considered all potential natural resources, environmental, and cultural impacts of the construction and demolition project (hereinafter, "Proposed Action"), both as solitary actions and in conjunction with other proposed activities. This Finding of No Significant Impact (FONSI) summarizes the results of this EA and provides the U.S. Air Force's rationale for the Proposed Action and No-Action Alternative.

PROPOSED ACTION: The Proposed Action involves the construction of a new dormitory, the demolition of Building 1912, the partial demolition of Building 1899 and improvements to Ward Drive.

Alternative: The alternative to the Proposed Action is the No-Action. Implementation of the No-Action Alternative would not bring Scott AFB in compliance with the Dormitory Master Plan or with AFI 32-6005, *Unaccompanied Housing Management*.

Cultural and Historical Resources: The Proposed Action site is located outside of the Historic District at Scott AFB and is not located within any other cultural or historical resource area. Buildings 1900 and 1899 are not eligible for listing under the National Register of Historic Places.

No artifacts or historical objects are expected to be excavated during construction. In the unlikely event artifacts or historical objects are discovered, construction activities would cease until the Cultural Resources Specialist and Base Historian are notified and the appropriate action is accomplished.

Air Quality: Fugitive dust and construction vehicle exhaust would be generated during implementation of the Proposed Action. However, these emissions would not constitute a major source of air pollutants based on quantitative analyses of particulate matter and vehicle emissions generated by projects of similar size and scope. The estimated values of direct and indirect emissions are below the *de minimus* thresholds specified at 40 CFR 93.153(b)(1). Therefore, the Proposed Action would not increase emissions over baseline emission levels. The Proposed Action would be in compliance with all relevant requirements and milestones contained in the Illinois State Implementation Plan; therefore, a conformity determination would not be necessary.

Hazardous Materials and Waste: The use of hazardous materials during demolition activities would be limited and generation of hazardous waste would not be anticipated from the Proposed

Action. There would be no anticipated impact to human health or the environment during demolition activities or from activities associated with implementation of the Proposed Action.

Noise: Some noise impacts would occur during the implementation of the Proposed Action. The amount of noise generated from operational activities would be temporary and negligible.

Geology and Soils: The surface area would be disturbed by demolition and construction activities at the Proposed Action; however, this disturbance would not be a significant negative impact to soil or geological resources. Necessary measures and best management practices would be utilized to prevent soil erosion during and after demolition activities.

Water Resources: There would be no significant impacts to surface or ground water quality during demolition of the Proposed Action. Necessary measures and best management practices would be utilized to prevent sedimentation of surface water resources.

Occupational Safety and Health: If the Proposed Action is implemented, no unfavorable impacts to occupational health and safety are projected. A positive impact to Scott AFB personnel is expected.

Biological Resources: No biological resources, including endangered or threatened species, or rare fauna and flora inhabit the Proposed Action area. As such, no impacts are probable.

Environmental Justice: There would be no disproportionately high or adverse impact on minority or low-income populations as a result of the Proposed Action.

Indirect and Cumulative Impacts: No impacts are anticipated from site-specific, direct, indirect, or cumulative impacts associated with the Proposed Action.

Relationship Between Short-term Uses and Enhancement of Long-Term Productivity: Implementation of the Proposed Action is not anticipated to impact short-term or long-term productivity.

Irreversible and Irretrievable Commitment of Resources: There would be minor irreversible and irretrievable commitment of resources if the Proposed Action were selected. Military funds would be permanently expended.

Unavoidable Adverse Impacts: There would be no major unavoidable adverse impacts associated with the Proposed Action.

FINDING OF NO SIGNIFICANT IMPACT: Based upon my review of the facts and analyses contained in the attached Environmental Assessment for the Construction of a new Dormitory dated May 2006, I conclude that implementation of the Proposed Action would not have a significant impact, either by itself or cumulatively with other projects at Scott AFB. Accordingly, the requirements of NEPA, the CEQ regulations, and 32 CFR 989 are fulfilled and an Environmental Impact Statement is not required. The signing of this Finding of No Significant Impact completes the environmental impact analysis process under Air Force Regulations.

ALAN L. HUNT, JR., Colonel, USAF
Commander

DATE

Attachment:
Environmental Assessment